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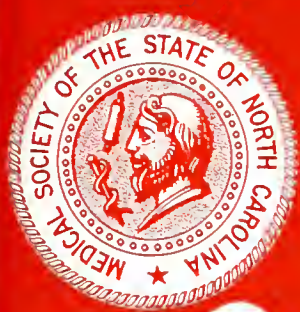


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MEDICAL JOURNAL

PUBLISHED MONTHLY BY THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

IN THIS ISSUE:

President's Inaugural Address

EDGAR T. BEDDINGFIELD, JR., M.D.

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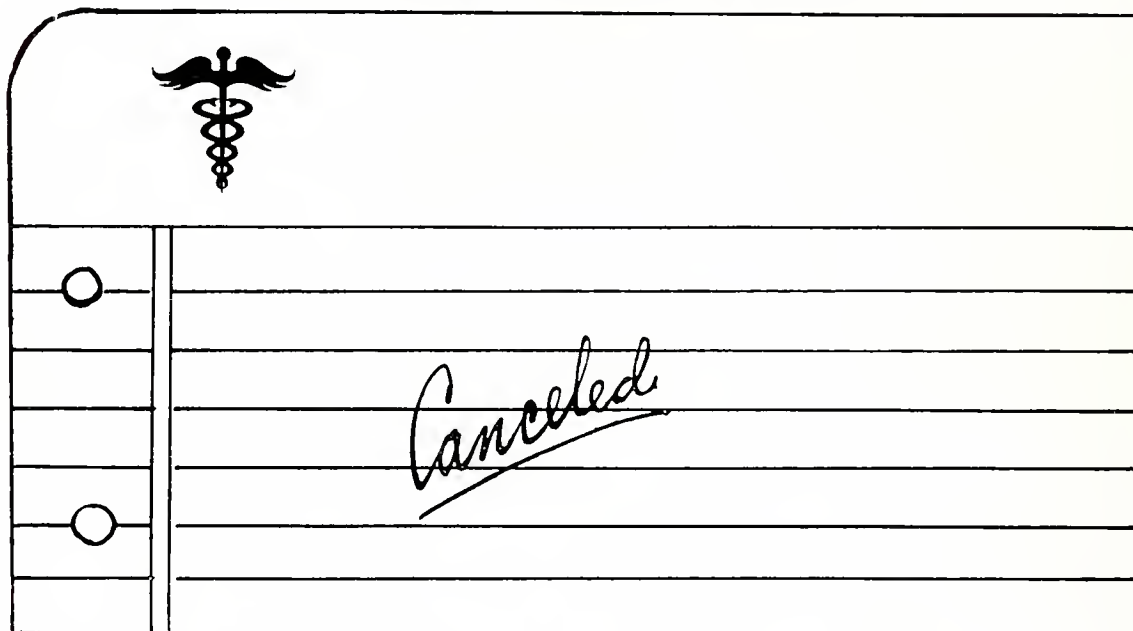
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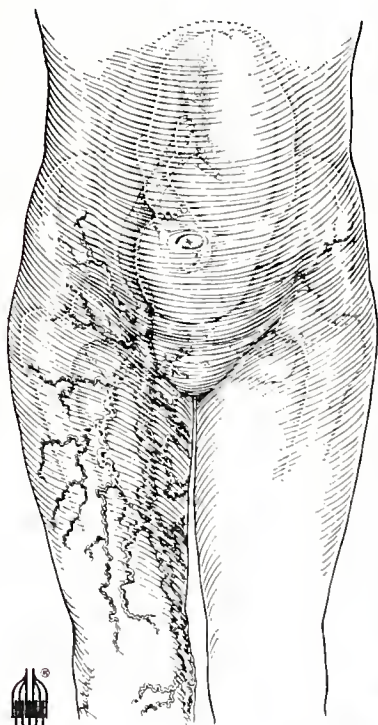
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Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

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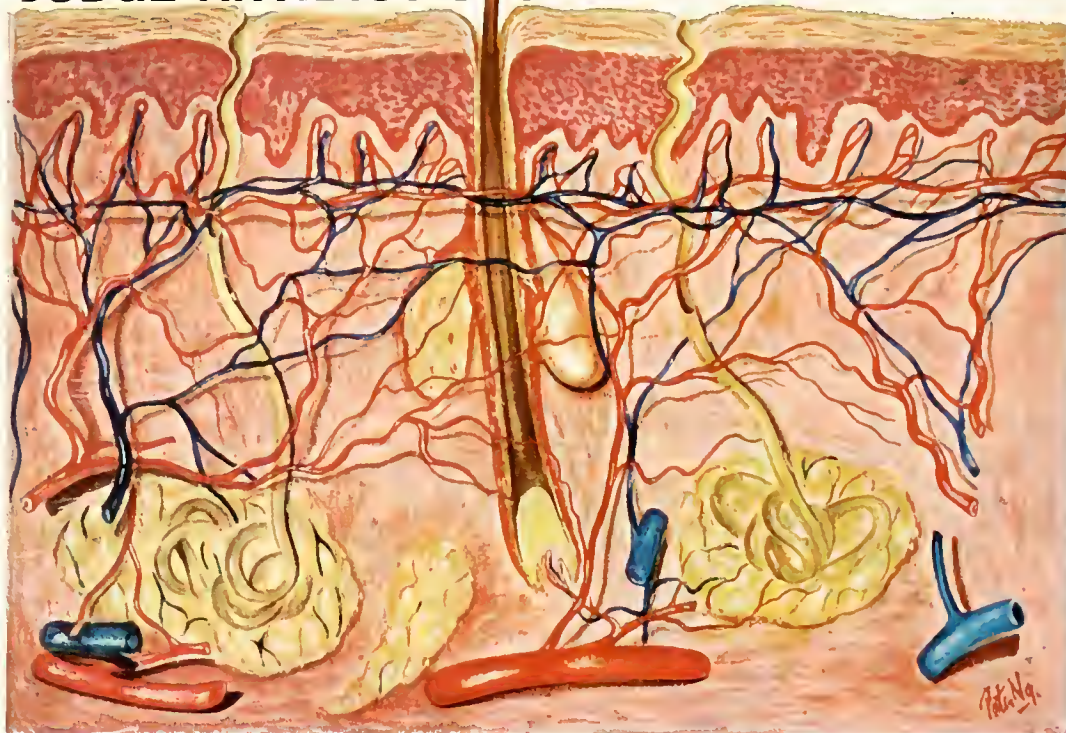
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Warnings: Acute anaphylaxis (may prove fatal unless promptly controlled) is rare but more frequent in patients with previous penicillin sensitivity, bronchial asthma or other allergies. Resuscitative (epinephrine, aminophylline, pressor amines) and supportive (antihistamines, methylprednisolone sodium succinate) drugs should be readily available. Other rare hypersensitivity reactions include nephropathy, hemolytic anemia, leucopenia and thrombocytopenia.

In suspected hypersensitivity, evaluation of renal and hematopoietic systems is recommended.

Precautions: In suspected staphylococcal infections, perform proper laboratory studies including sensitivity tests. If overgrowth of nonsusceptible organisms occurs (constant observation is essential), discontinue penicillin and take appropriate measures. Whenever allergic reactions occur, withdraw penicillin unless condition being treated is considered life threatening and amenable only to penicillin. Penicillin may delay or prevent appearance of primary syphilitic lesions. Gonorrhea patients suspected of concurrent syphilis should be tested serologically for at least 3 months. When lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. Treat beta-hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent rheumatic fever or glomerulonephritis. In staphylococcal infections, perform surgery as indicated.

Adverse Reactions: (Penicillin has significant index of sensitization): Skin rashes, ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; serum sickness-like reactions, including chills, fever, edema, arthralgia and prostration. Severe and often fatal anaphylaxis has been reported (see "Warnings").

Composition: Tablets—125 mg. (200,000 units), 250 mg. (400,000 units), 500 mg. (800,000 units); Liquid—125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc.

Wyeth Laboratories Philadelphia, Pa.

ORAL PEN·VEE® K
(potassium phenoxymethyl penicillin)



“I’m sick
of spinning”



G. Gorn

When vertigo began, her life took a turn for the worse.

Either she spins and the room stands still,
or the other way around...and around and around.

Even when she lies down, the spinning
continues. Sometimes there's nausea and vomiting, too.

It's just one thing after another.

You can help stop the spin
with

BONINE®
(MECLIZINE HCl)

Bonine protects most patients against vertigo and
nausea up to 24 hours with a single dose.

Pleasant-tasting Bonine tablets are chewable and
can be taken anytime, anywhere,
without water. In difficult cases, multiple daily doses
may be necessary for maximum response.

Precautions: Although the incidence of drowsiness and atropine-like side effects such as dry mouth and blurring of vision is low, the physician should alert the patient to the need for due precautions when engaging in activities where alertness is mandatory. *Use in women of childbearing age:* In weighing potential benefits vs. risk in women of childbearing age, consider the fact that a review of available animal data reveals that meclizine exerts a teratogenic response in the rat. In one study a dose of 50 mg./kg./day (50 times the maximum recommended human dose) produced cleft palate in 2 of 87 fetuses when administered to the rat at critical times during the first 15 days of gestation. At doses of 125 mg./kg./day, meclizine will produce 100% incidence of cleft palate in the rat. At doses of 25 mg./kg./day, decreased calcification of the vertebrae and relative shortening of the limbs were also produced in the rat, but experts disagree as to whether this is a teratogenic response. While available clinical data are inconclusive, scientific experts are of the opinion that this drug may possess a potential for adverse effects on the human fetus. Consequently, consideration should be given to initial use of a nonphenothiazine agent that is not suspected of having a teratogenic potential. In any case, the dosage and duration of treatment should be kept to a minimum.

Supply: 25 mg. scored tablets.

More detailed professional information available on request.



LABORATORIES DIVISION
New York, N.Y. 10017



The Fortunate One.

Her urinary tract infection reveals itself through pain and discomfort.

While the pain and discomfort of a G.U. infection are anything but pleasant, the patient may be luckier than she realizes. That burning sensation (and/or frequency, urgency, dysuria) is a usually reliable sign of a urinary tract infection. And it's her good fortune that her infection won't go undetected...or untreated.

Azo Gantanol® therapy usually provides analgesic action within one-half hour, while control of the infection begins within two hours. Azo, a specific urinary analgesic, soothes inflamed mucosa to give symptomatic relief. At the same time, the antibacterial component, Gantanol (sulfamethoxazole), achieves therapeutic levels in the blood and urine, with diffusion into interstitial fluids. Azo Gantanol—a good choice when urinary tract infection reveals itself through symptomatic distress.

Before prescribing, please consult complete product information, a summary of which appears on opposite page.

Azo Gantanol®

(Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.)

Azo for the pain Gantanol[®] (sulfamethoxazole) for the pathogens

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Urinary tract infections with associated pain or discomfort when due to susceptible organisms; prophylactically in urologic surgery, catheterization and instrumentation.

Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants, newborn infants during the first three months of life, glomerular nephritis, severe hepatitis, uremia and pyelonephritis of pregnancy with gastrointestinal disturbances.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In closely intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed.

Precautions: Observe usual sulfonamide therapy precautions including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus and rickettsial infections.

Adverse Reactions: Headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, Stevens-Johnson syndrome, injection of the conjunctiva and sclera, petechiae, purpura, hematuria or crystaluria may occur, in which case the dosage should be decreased or the drug withdrawn.

Dosage: Adults—4 tablets initially, then 2 tablets morning and evening.

How Supplied: Tablets, bottles of 50.



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LABORATORIES

Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

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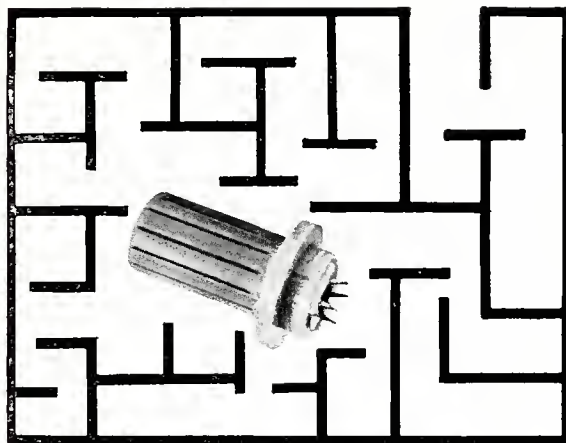
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HISTO IS CONFUSING.

Histoplasmosis can mimic such unrelated diseases as TB, leukemia, pneumonia and syphilis. Use the blue Histoplasmin LEDERTINE[™] Applicator as the first step in differential diagnosis and as a routine step in physical examinations for the permanent records of your patients.

HISTOPLASMIN, TINE TEST

(Rosenthal)

Precautions—Nonspecific reactions are rare, but may occur. Vesiculation, ulceration or necrosis may occur at test site in highly sensitive persons. The test should be used with caution in patients known to be allergic to acacia, or to thimerosal (or other mercurial compounds).



LEDERLE LABORATORIES

A Division of American Cyanamid Company, Pearl River, New York

473-9

Norflex[®]

(orphenadrine citrate, 100 mg.)

**Takes
the agony
out of
low back pain**



Take the agony
out of
low back pain...
Norflex[®] (orphenadrine citrate)
relaxes the muscles
in spasm.

Restore mobility
and hasten
recovery...
prescribe
Norflex
1 tablet b.i.d.

Indications: Acute spasm of voluntary muscles, regardless of location; especially post-traumatic, discogenic, and tension spasms. **Contraindications:** Due to its anticholinergic action, NORFLEX should not be used in patients with glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcer, prostatic hypertrophy or obstruction at the bladder neck, cardiospasm (megaesophagus) and myasthenia gravis. Use with caution in patients with tachycardia. Do not use propoxyphene (Darvon[®]) concurrently. **Adverse Reactions:** Due mainly to anticholinergic action and usually at high dosage. They may include dryness of the mouth, tachycardia, palpitation, urinary hesitancy or retention, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation and drowsiness. Infrequently, mental confusion in the elderly, urticaria or other dermatoses. Adverse reactions are usually eliminated by reduction in dosage. Two cases of aplastic anemia, with no established causal relationship, have been reported. **Dosage and Administration:** Two tablets per day for adults, regardless of weight or sex; one in the morning and one in the evening. Each tablet contains 100 mg. orphenadrine citrate. For full information, see Package Insert or P.D.R.

Norflex[®]
(orphenadrine citrate)

Riker Laboratories
Div. of Dart Industries Inc.
Northridge, California 91324

The Riker representatives in your area are:
Charles R. Baker
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You can give a better ear exam
EASIER with the new
Hotchkiss[™] Otoscope

A radical advance in otoscope design, the Hotchkiss employs the principles of modern optics to give you a brighter, clearer, more informative view of the ear canal and tympanic membrane. It weighs just five ounces (including batteries) and fits into your shirt or jacket pocket. You can carry it anywhere; use it repeatedly without fatigue. And the Hotchkiss is built to stand up to far rougher treatment than you're likely to give it.

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I would like your Representative to call for an appointment to show me the Hotchkiss Otoscope.

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"Shall I order Maalox?"



"Yes. Patients respond well to it, and seem to take it more faithfully."

Works well · Doesn't constipate · Tastes good · Economical

Supplied: Maalox Suspension (12 fl. oz.). *Also available:* Maalox No. 1 Tablets (0.4 Gm.) : no sugar, low sodium content. Maalox No. 2 Tablets (0.8 Gm.) : double strength for double antacid action.



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THE NUMBER ONE ANTACID

Maalox[®]
MAGNESIUM-ALUMINUM HYDROXIDE

One of these disposables comes prefilled.
Its unit dose – in nonreactive glass
cartridge – is premeasured.

The cartridge is clearly labeled:
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Even expiration date where appropriate.

You're more confident that the patient gets...





...just what the doctor ordered with the Tubex Closed Injection System.

Injectations with the Tubex system are as easy as 1, 2, 3,

- 1. Select**—from an extensive variety of prefilled Tubex sterile cartridge-needle units.* No multi-dose vials to bother with; no unlabeled syringes to cause confusion.
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*For injectables not yet in the ever-expanding prefilled Tubex line, empty sterile cartridge-needle units are available.

TUBEX[®]

Closed Injection System
Hypodermic Syringe
Sterile Cartridge-Needle Unit



Wyeth Laboratories Philadelphia, Pa.

in the complex picture
of moderate to severe anxiety...



here is a **new** reason
for prescribing **Mellaril**
(Thioridazine HCl)

**effectiveness in
mixed anxiety-depression**

long recognized for its usefulness in the
treatment of moderate to severe anxiety,
Mellaril is now also known to be effective
against mixed anxiety-depression.

Often the symptoms of anxiety states are
difficult to sort out—even with the most careful
probing. The patient may manifest symptoms of
agitation, restlessness, insomnia, somatic
complaints. But what of the depression that may
be mixed in the total picture? It is reassuring
to know that Mellaril may be prescribed—with
strong possibilities of success—when there is
anxiety alone or a mixture of anxiety
and depression.

Before prescribing or administering, see Sandoz literature for full product information, including adverse reactions reported with phenothiazines. The following is a brief precautionary statement.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine hydrochloride). While there is no evidence at present that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.

Mellaril[®]
(Thioridazine HCl)
25 mg. t.i.d.

**for moderate to severe anxiety
and mixed anxiety-depression**



SANDOZ PHARMACEUTICALS, HANOVER, N. J.

68-169



...now fast relief of hay fever symptoms with

NTZ[®]
Nasal Spray



When pollens fly, just one or two squirts of nTz in each nostril, followed in a few minutes by a second spraying, shrink swollen nasal passages almost on contact. And breathing comfort follows. The antihistamine component of nTz helps combat the allergic reaction and lessen rhinorrhea, sneezing and itching; its antiseptic wetting agent promotes rapid spread of components.

nTz Nasal Spray affords the well-known benefits of Neo-Synephrine[®] in a carefully balanced formula which includes:

Neo-Synephrine[®] (brand of phenylephrine) HCl, 0.5% (adult strength), decongestant
Thenfadi[®] (brand of thenyldiamine) HCl, 0.1%, antihistamine
Zephiran[®] (brand of benzalkonium as chloride, refined) Cl, 1:5000, antiseptic wetting agent
Treatments with nTz should be repeated every three or four hours as needed. nTz is for temporary relief of nasal symptoms and overdosage should be avoided. Available in squeeze bottles of 20 ml. and 1 oz. bottles with dropper.
Winthrop Laboratories, New York, N.Y. 10016 (1289)

When it's more than a bad cold



your patient can feel better
while she's getting better

Achrocidin[®]

Tetracycline HCl—Antihistamine—Analgesic Compound

Each tablet contains: ACHROMYCIN[®] Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Caffeine 30 mg.; Salicylamide 150 mg.; Chlorothen citrate 25 mg.

In tetracycline-sensitive bacterial infection complicating respiratory allergy, ACHROCIDIN brings the treatment together in a single prescription—prompt relief of headache and congestion together with effective control of the organisms frequently responsible for complications leading to prolonged disability in the susceptible patient.

For children and elderly patients you may prefer caffeine-free ACHROCIDIN Syrup. Each 5 cc contains: ACHROMYCIN (Tetracycline) equivalent to Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Salicylamide 150 mg.; Ascorbic Acid (C) 25 mg.; Pyrilamine Maleate 15 mg.

Contraindications: Hypersensitivity to any component.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastric distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and

may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity* reactions—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.



327-8

now she can cope...

thanks to

Butisol SODIUM®
(SODIUM BUTABARBITAL)

the "daytime sedative" for
everyday situational stress

When stress is situational—environmental pressure, worry over illness—the treatment often calls for an anxiety-allaying agent which has a prompt and predictable calming action and is remarkably well tolerated. BUTISOL SODIUM (sodium butabarbital) meets this therapeutic need.

After 30 years of clinical use . . . still a first choice among many physicians for dependability, safety and economy in mild to moderate anxiety.

Contraindications: Porphyrria or sensitivity to barbiturates.

Precautions: Exercise caution in moderate to severe hepatic disease. Elderly or debilitated patients may react with marked excitement or depression.

Adverse Reactions: Drowsiness at daytime sedative dose levels, skin rashes, "hangover" and systemic disturbances are seldom seen.

Warning: May be habit forming.

Usual Adult Dosage: As a daytime sedative, 15 mg. ($\frac{1}{4}$ gr.) to 30 mg. ($\frac{1}{2}$ gr.) t.i.d. or q.i.d.

Available for daytime sedation: Tablets, 15 mg. ($\frac{1}{4}$ gr.), 30 mg. ($\frac{1}{2}$ gr.); Elixir, 30 mg. per 5 cc. (alcohol 7%).

BUTICAPS® [Capsules BUTISOL SODIUM (sodium butabarbital)] 15 mg. ($\frac{1}{4}$ gr.), 30 mg. ($\frac{1}{2}$ gr.).

McNEIL

McNeil Laboratories, Inc., Fort Washington, Pa.



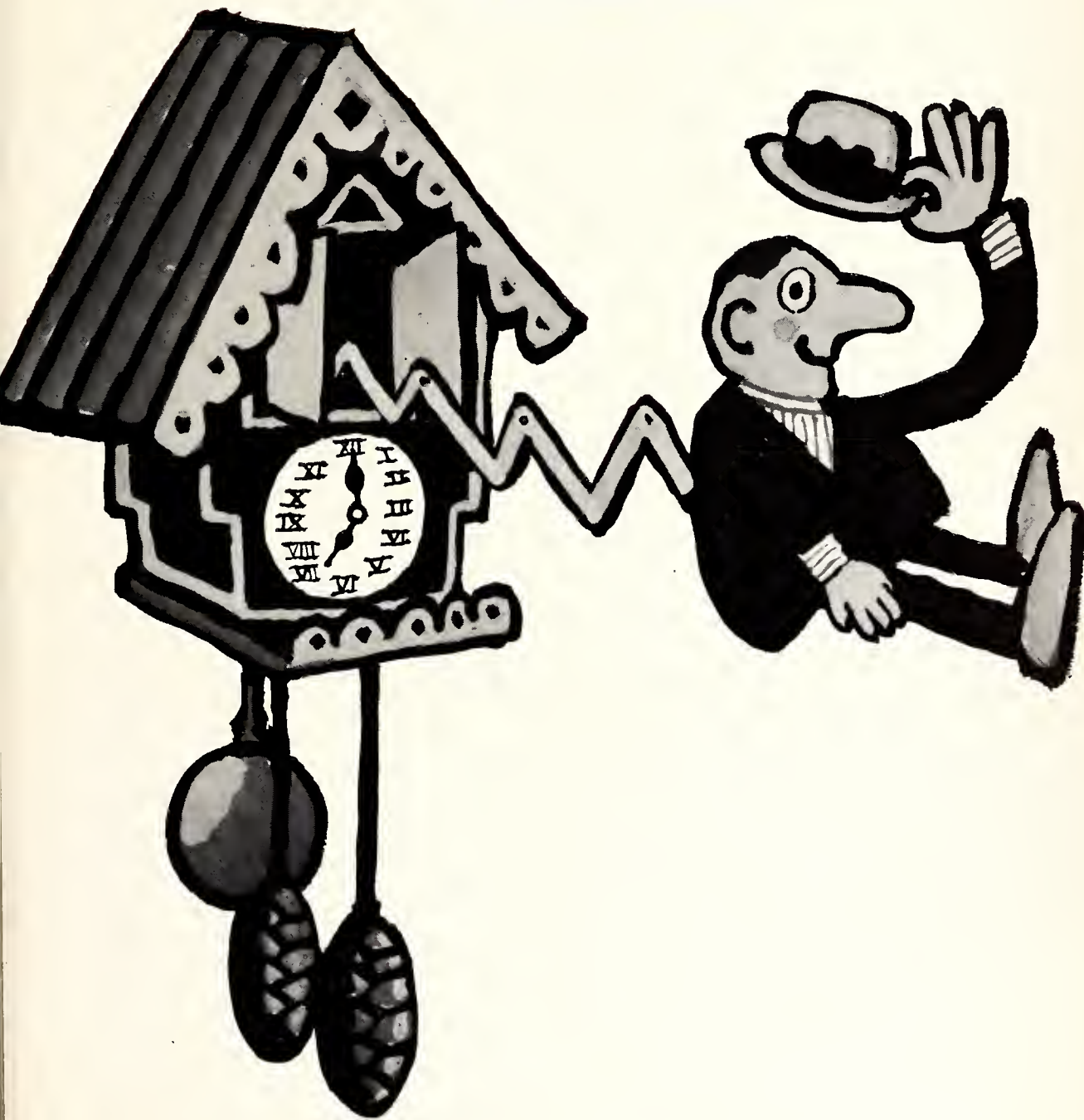
Dulcolax®...so predictable you can almost set patients by it.

Dulcolax works so effectively that the time of bowel evacuation can often be predicted.

Dulcolax tablets taken at night will usually result in a convenient bowel movement the following morning. Dulcolax suppositories generally work within 15 minutes to an hour.

Dulcolax may be given to the aged, pregnant or nursing women, and children. It may be particularly helpful in conditions in which straining should be avoided. The drug, however, is contraindicated in the acute surgical abdomen.

Dulcolax® bisacodyl





Clues to PVD The geriatric smoker

In studies on peripheral vascular disease—a common by-product of the degenerative aging process—considerable attention has focused on the important role of smoking in the progression of the disease. Although it may not be etiologic, smoking is widely recognized as a prominent contributing factor.¹

Skin blood flow—significant factor in PVD. Cutaneous digital vasoconstriction caused by nicotine has been observed both in normal subjects and in patients with peripheral vascular disorders.^{1,2} Among patients with peripheral vascular disease, however, age and the severity of the disease appear to modify the effects of nicotine. For example, in a study of older patients with marked peripheral vascular disease,³ changes induced by smoking were not statistically significant for the group as a whole. This was explained on the basis of decreased skin reactivity. *Smoking is not permissible in any stage of the disease, since even "... minimal reduction in blood flow in patients with ischemic limbs may pro-*

*duce a further reduction in tissue nutrition, and thus may be another case of the proverbial straw on the camel's back."*³

In another study of patients with peripheral vascular disease,⁴ the investigators stress that decreased skin blood flow during smoking "... is the factor of most importance to the patient with peripheral vascular disease." *While such patients may adjust to the discomfort of vascular insufficiency in skeletal muscle, decreased skin blood flow may often lead to severe symptomatology.*

More and more physicians have adopted the practice of investigating for peripheral vascular disorder when confronted with a geriatric patient who is a habitual smoker. Once a diagnosis is established, therapeutic measures are directed toward increasing the peripheral circulation and appropriate management of the patient's general medical needs. These include the important safeguards of keeping warm and refraining from smoking. Professional model posed for illustration.

Important in
total management of
peripheral vascular disease,
vascular spasm or
chilblains

Roniacol[®] Timespan[®]

(nicotinyl alcohol tartrate)

for relief of ischemic symptoms

Convenience of b.i.d. dosage—sustained-release Timespan Tablets usually provide prolonged relief of ischemic symptoms with two doses daily.

Smoothness of onset—the action of Roniacol (nicotinyl alcohol) is smooth and gradual in onset, rarely causing severe flushing.

Selectivity of action—relaxes the musculature of peripheral blood vessels.

High degree of safety—side effects seldom require discontinuation of therapy.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Conditions associated with deficient circulation; e.g., peripheral vascular disease, vascular spasm, varicose ulcers, decubital ulcers, chilblains, Meniere's syndrome and vertigo.

Caution: Roche Laboratories endorses caution in the administration of any therapeutic agent to pregnant patients.

Side Effects: Transient flushing, gastric disturbances, minor skin rashes and allergies may occur in some patients, seldom requiring discontinuation of the drug.

Dosage: 1 or 2 Timespan Tablets morning and night.

How Supplied: Timespan Tablets—150 mg nicotinyl alcohol in the form of the tartrate salt, bottles of 50.

References: (1) Roth, G. M.; Shick, R. M., and Secrest, R. R., in James, G., and Rosenthal, T., eds.: *Tobacco and Health*, Springfield, Ill., Charles C Thomas, 1962, pp. 311-322. (2) Entmacher, P. S.: *Proc. Med. Sect. Amer. Life Convention* 51:149, 1963. (3) Freund, J., and Ward, C.: *Ann. New York Acad. Sci.* 90:85, 1960. (4) Coffman, J. D., and Javett, S. L.: *Circulation* 28:932, 1963.



Roche
LABORATORIES

Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110



"All Registered Nurses are Alike"

It stands to reason. They all go through the same training; they all have to pass the same tests; they all have to measure up to the same standards. Therefore, all registered nurses are alike.

That's nonsense, of course. But it's no more nonsensical than what some people say about aspirin. Namely: since all aspirin is at least supposed to come up to certain required standards, then all aspirin tablets must be alike.

Bayer's standards are far more demanding. In fact, there are at least *nine specific differences* involving purity, potency and speed of tablet dis-

integration. These Bayer® standards result in significant product benefits including gentleness to the stomach, and product stability that enables Bayer tablets to *stay* strong and gentle until they are taken.

So next time you hear someone say that all aspirin tablets are alike, you can say, with confidence, that it just isn't so.

You might also say that all registered nurses aren't alike, either.





**He is a diabetic.
He is middle-aged.
When he needs an antibiotic
he may be a candidate for
DECLOSTATIN[®] 300
Demethylchlortetracycline HCl 300 mg
and Nystatin 500,000 units
CAPSULE-SHAPED TABLETS Lederle **b.i.d.****

guard susceptible patients against intestinal monilial overgrowth during broad-spectrum therapy—the protection of declostatin is combined with demethylchlortetracycline in DECLOSTATIN.

For your susceptible candidates, prescribe DECLOSTATIN as the broad-spectrum therapy that prevents monilial overgrowth.

Effectiveness: Because its antibacterial component is DECLOMYCIN (demethylchlortetracycline), DECLOSTATIN should be equally or more effective therapeutically than other tetracyclines in infections caused by tetracycline-sensitive organisms. The antifungal component, Nystatin, acts against superinfection by antibiotic-resistant fungal overgrowth (particularly monilia) in the intestinal tract.

Contraindication: History of hypersensitivity to demethylchlortetracycline or nystatin.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may cause an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, phototoxic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

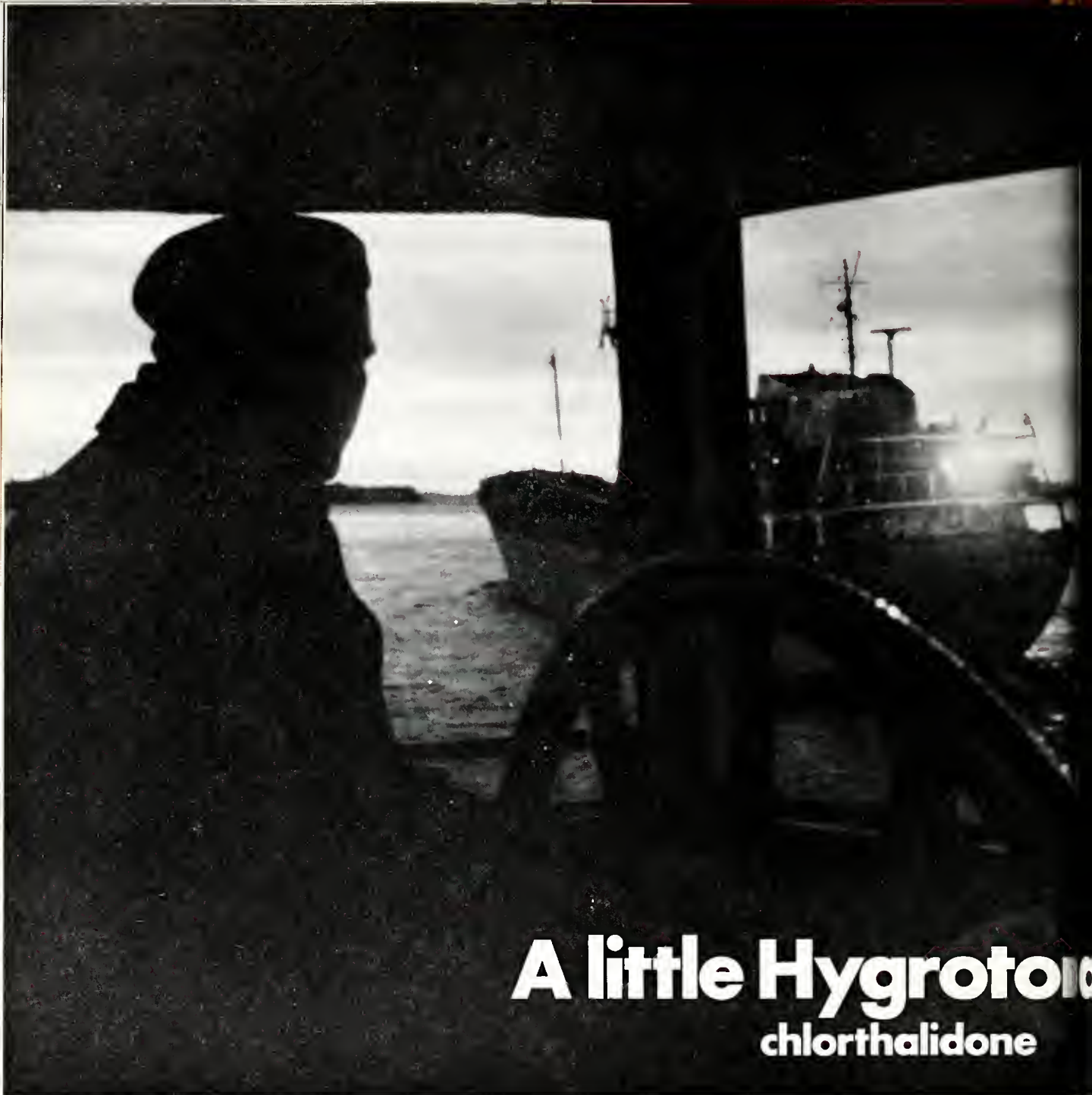
Side Effects: Gastrointestinal system—*anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani.* Skin—*maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported.* Photosensitivity: *onycholysis and discoloration of the nails (rare).* Kidney—*rise in BUN, apparently dose related.* Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—*urticaria, angioneurotic edema, anaphylaxis.* Teeth—*dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood.* Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Demethylchlortetracycline may form a stable calcium complex in any bone-forming tissue with no serious harmful effects reported thus far in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.



LEDERLE LABORATORIES

A Division of American Cyanamid Company, Pearl River, New York



A little Hygrotol

chlorthalidone



can work a long diuretic day

**the way from one daily tablet to the next
help control edema and hypertension**

prolonged action usually provides smooth, sustained diuretic effectiveness; real one-a-day dosage, right from the start; convenience economy.

proton, chlorthalidone, can cause side effects. And it's contraindicated in hypersensitivity to the drug and severe renal and hepatic diseases.

Check the prescribing information. It's summarized on the next page.

Geigy



A little Hygroton® can work a long diuretic day

chlorthalidone

Indications: Hypertension and many types of edema involving retention of salt and water.

Contraindications: Hypersensitivity and most cases of severe renal or hepatic diseases.

Warning: With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has been required frequently and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur.

Use with caution in pregnant women and nursing mothers since the drug may cross the placental barrier and appear in cord blood and since thiazides may appear in breast milk. The drug may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. When used in women of childbearing age, balance benefits of drug against possible hazards to fetus.

Precautions: Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated.

Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take special care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended.

Adverse Reactions: Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, glycosuria, hyperuricemia, headache, muscle cramps, orthostatic hypoten-

sion, which may be potentiated when chlorthalidone is combined with barbiturates, narcotics or alcohol, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization.

Average Dosage: 50 or 100 mg. with breakfast daily or 100 mg. every other day.

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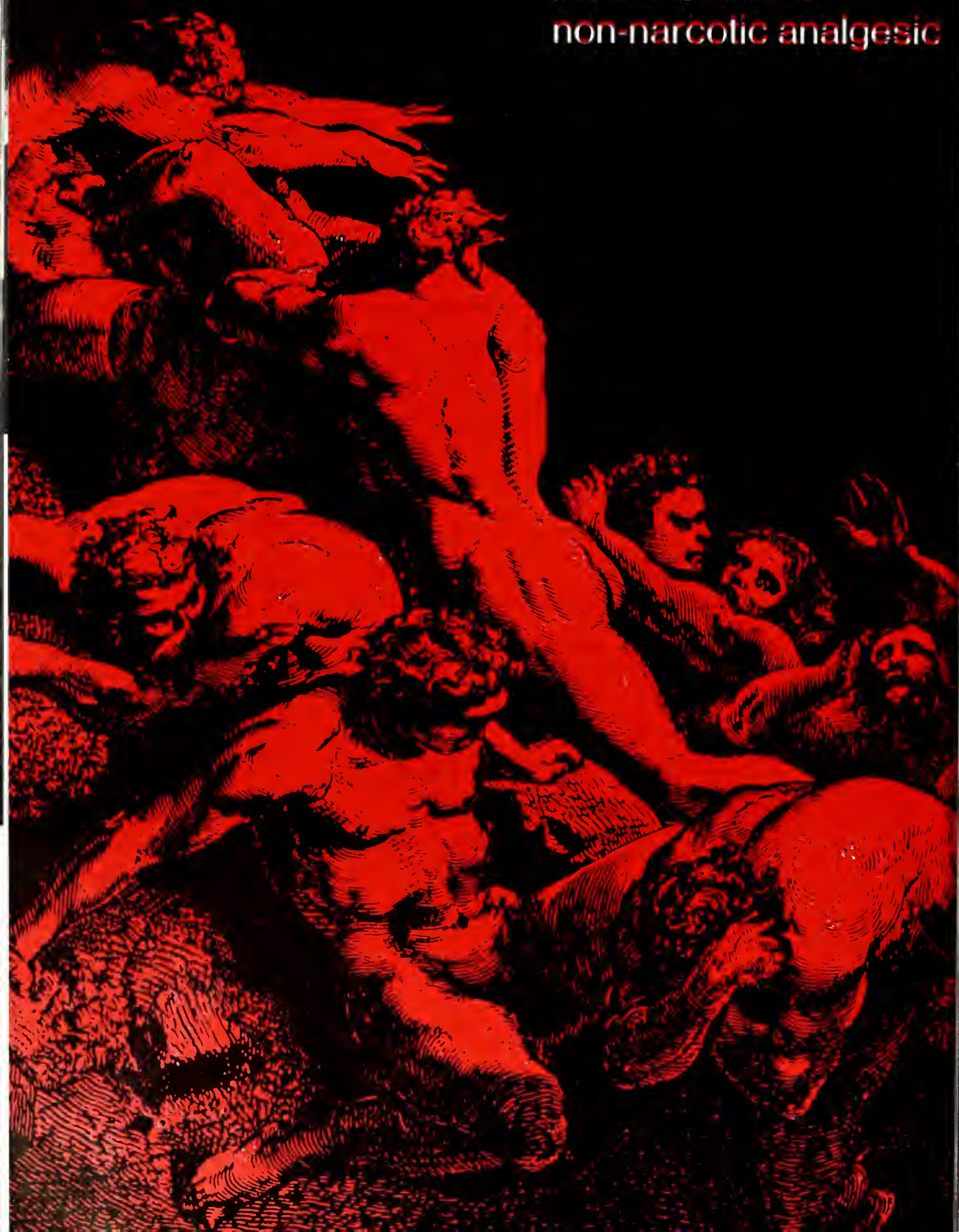
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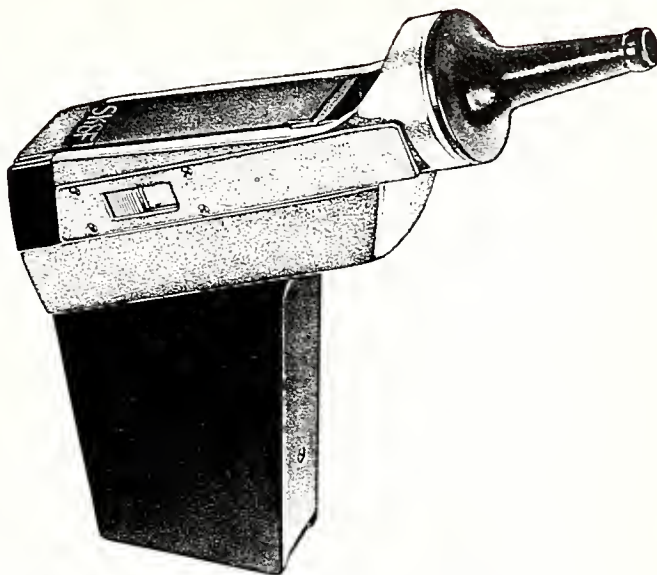
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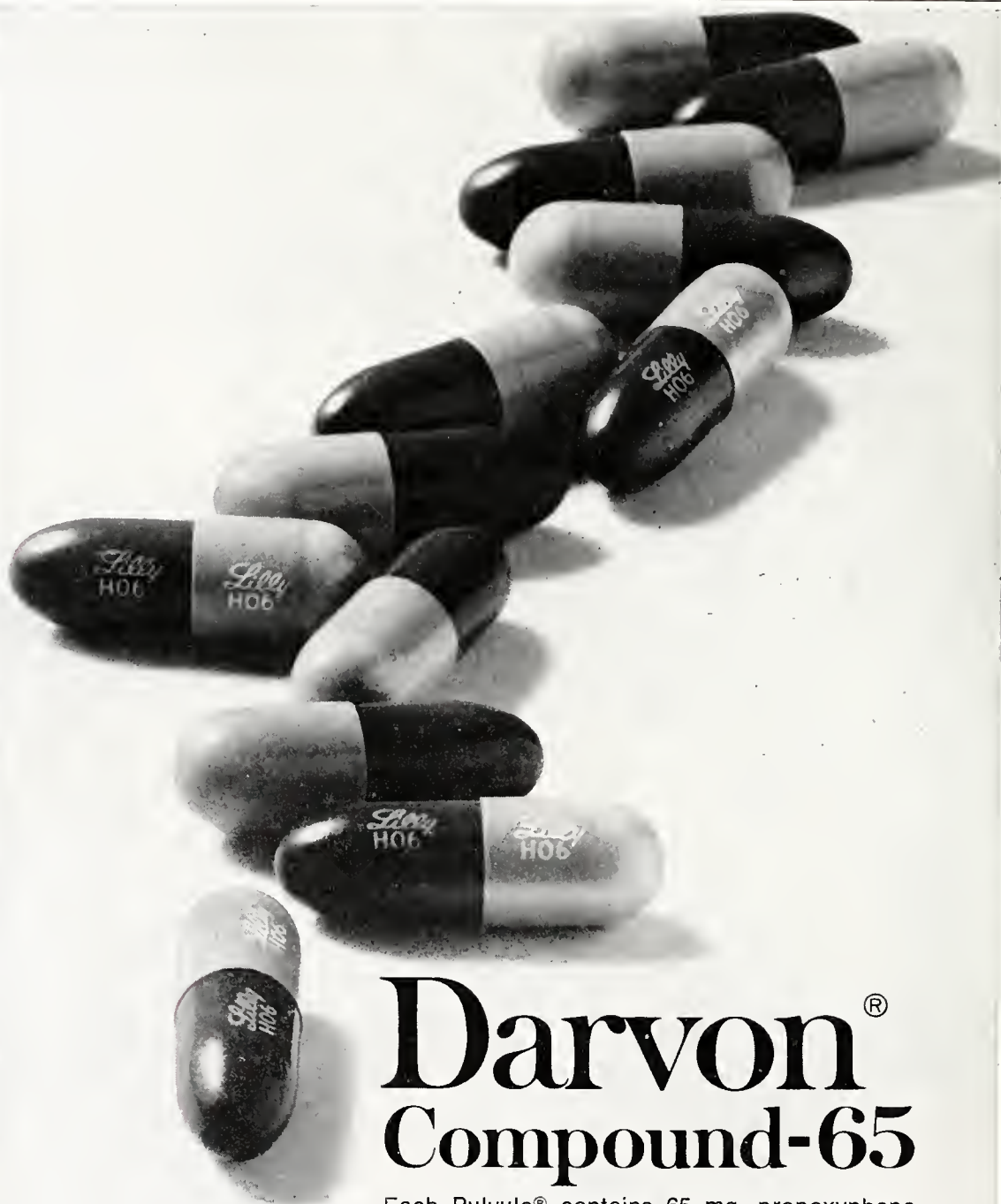
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President's Inaugural Address

Medicine in North Carolina—1969: A Conspectus

EDGAR T. BEDDINGFIELD, JR., M.D.

A conspectus is, very simply, an overall view.

In these remarks I hope to present to you an overall view of the present issues and opportunities confronting the profession in this state, at this point in time, as they appear to me.

We learn from Lefler and Newsome's history of our state that included in the group sent by Sir Walter Raleigh to colonize this area in 1585 were "apothecaries, a physician, and a clergyman." This group reached Hatteras on July 27, 1585, and I suppose that, excluding the Indian medicine-man, this unnamed physician was the first North Carolina physician. The records do not indicate that he actually started the Committee Liaison to Pharmacy with the apothecaries in the group, nor that he held a meeting of the Committee on Medicine and Religion, although he could have.

We do learn that the chief threats to life and limb were hunger, disease, and violence from unfriendly natives. One wonders just how much our concerns have changed. In the past few days of this meeting, we have heard much about disease; discussions about hunger in the South have made the news recently, and on June 2, 1969, the State Board of Health is holding an initial planning session relating to North Carolina's part in the National Nutrition Survey—in other words, a study of hunger; and in view of our discussions this morning about highway deaths and injuries, it appears that to many of us

the unfriendly natives do still pose a threat.

And so it appears that in one manner of speaking, Medicine 1969 has the same areas of concern as did that sole physician in the Raleigh Colony, Medicine 1585. We also have a few more areas of interest and concern that he did not have.

I am by nature an optimist, and although there are certainly areas of concern which exist today, and I am realistic enough to realize that many of these problem areas will continue to exist a year from today, I do not believe them to be insoluble, and it is my fervent hope that working together, we can get on with the job.

In a very real sense, both our accomplishments and our shortcomings combine to threaten our survival. I refer to our accomplishments in the scientific and technical arenas, and our apparent shortcomings in applying the benefits of an improved technology to all segments of our population. Part of this is perhaps not directly attributable to medicine as a profession, and yet we have been assigned a portion of the responsibility. For example, hunger, malnutrition, or both do exist in various parts of the nation, especially in the South, although none of us are as yet certain to what degree. This occasionally becomes evident as a clinically apparent recognizable disease entity. If we included, for example, microcytic anemia secondary to iron deficiency as a disease entity secondary to hunger and/or malnutrition, we are indeed going to uncover a large incidence. This fact will be publicized. Medicine will receive some indictment, and yet the factors producing this incidence of nu-

Delivered at the Third General Session, Medical Society of the State of North Carolina, Pinehurst, May 22, 1969.
Wilson Clinic, Wilson, N. C.

trional deficiency anemia are complex and are society-based, not purely medically based. Income, education, social habits, and other factors play an important role; and the correction of these social etiologic factors is a responsibility of all of society, not of medicine alone. However, we are an important part of that society and we cannot divorce ourselves from it. In his remarks at our Memorial Service here Sunday night, the Rev. Robert E. Seymour made the observation that physicians, perhaps to a greater extent than any other men, are privileged to "enjoy life in its greatest dimensions." He further observed that "*caring* is a vital dimension of the medical profession." Betty McCain reported that in considering worthwhile projects for the attention and efforts of the Auxiliary, they unearthed a portfolio of projects—"unmet community needs."

I believe that most of us do a good job in the private practice of medicine, in our prime duty of taking care of our own patients, but I say to you today, every single one of us has a larger responsibility. After we take off the white coat and depart from the office or the hospital, we are not for the moment in the private practice of medicine, but we are then medically knowledgeable members of the community. It has been said, "We are in the public practice of medicine, and we must be both responsible for and responsive to the public interest—in the broadest sense."

In addition to efforts that are purely local through our local societies, schools, civic organizations, and churches, I submit that it is through the vehicle of this State Society that we might become maximally effective in this public practice of medicine. If we are to be successful in the public practice of medicine, our Society must involve and must represent a unified profession. It must represent all specialties, all geographic areas, all races and religions, all age groups. We must resist fragmentation. We must speak for academicians as well as practitioners, for the solo doctor as well as groups, for medical schools as well as public and mental health agencies. We cannot allow "hardening of the cate-

gories" to impede our progress. The stakes are too high.

Specific areas of concern to medicine, and therefore to our Society, in this new Society year, include (but are not limited to) the following:

1. A consideration of new and different approaches to the delivery of health care. I include here our continuing and increasing participation in such programs as the research effort in this area just getting under way at the University at Chapel Hill, the Regional Medical Program, comprehensive health planning, regional programs such as Appalachia, the Coastal Plains Commission, and others.

2. *Health Manpower*: Dr. Welton, in his presidential address, made observations in this area, and I am in basic agreement. Our debate yesterday in the House of Delegates regarding the Physician Assistant Program is evidence of your interest and also of the need for more information and continued study. I strongly feel that high priority must be given to strengthening and enlarging our three existing medical schools. However, if we engage in any consideration other than short-term planning, it becomes apparent that even if the three schools fully implemented their announced plans for expanded enrollments, by 1980 we could anticipate annual graduates as follows: UNC—150, Duke—130, Bowman Gray—75. This is indeed progress in the number of graduates, but if we consider these totals in the light of the most conservative population estimates, which project the 1980 population of this state in excess of 6 million, we learn to our dismay that we will have made no improvement at all in the existing M.D.-population ratio.

Inasmuch as a minimum of ten years must elapse from the conception of a medical school to the entrance into practice of its first graduates, it is not too soon to begin now with the planning of an additional medical school (or schools) for this state. I do not speak to the location, institutional affiliation, or other specific details of such new schools, but I do firmly believe that it be-



Edgar T. Beddingfield, Jr., M.D.

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hooves us to view all the possibilities with an open mind and without prejudices.

3. *Education.* The report of our new Committee on Education has justly received general approval and enthusiasm. This committee will concern itself with recruitment, undergraduate, graduate, and postgraduate educational needs and wants; with the over-seeing of present and future programs for the training of related and ancillary members of the health team, and ultimately with the development of standards. All of this, of course, is related to the quality of health care, and may well be the most important new endeavor of our Society. I will support and strengthen this committee.

4. *Governmental programs:* I refer here specifically to Title XIX, or Medicaid, which we anticipate will become operational in this state early next year. Perhaps it is wise that North Carolina's entry into Medicare has been deferred until now. I hope that we can profit from the mistakes made in other areas, and avoid the pitfalls. We will work to the end that every dollar of public funds spent will go for a dollar's true value in quality health care.

5. *Intramural affairs:* We are presently engaged in a critical self-analysis of our headquarters office operations which is being conducted for us by an outside management consulting firm. The report of this evaluation will be made available to you at the earliest possible moment and I feel certain that you will want to proceed with some of the recommendations that might be forthcoming. As you know, we are likewise involved in the planning and construction of our new headquarters office building in Raleigh. Although it appears most unlikely that we will occupy this building during my year as your president, we will be in this building during the administration of Dr. Shaffner, and we will be well along with the project when we meet here again next year.

6. *Involvement of youth:* It is my observation that the physicians representing the more recent graduates are not sufficiently involved in the programs of this organization, and I am of the conviction that we need to recruit their youth, their abilities,

and their enthusiasm. I would welcome specific suggestions as to individual nominations for such individuals from all of you. Likewise, we have been approached by the present generation of medical students with an invitation to involve them, along with their ideas and their vigor, in certain phases of our activities. I believe that they have much to offer in a constructive manner. I would point out to you and to them that for decades we have had a provision for student membership in the Constitution. Any medical student may apply directly to the State Society for a student membership which involves an annual dues payment of \$3.00 and for which he receives a subscription to our JOURNAL, and which entitles him to all of the rights and privileges of membership (including membership in important committees) with the exception of voting and holding office. I would encourage the county societies to consider the creation of a similar category of student membership and to actively solicit the participation of these future physicians.

7. *Improved communications.* It is my plan to implement immediately an improved program of visitation to the county societies by the president and his representatives. This will be spelled out in a letter to the county society officers within the next few days. I anticipate the assistance of the president-elect, the two vice presidents, and the district counselors in this project. It is hoped that a new and different method of rapid, printed communication from the president to the county societies might be evolved, perhaps in the form of a news letter, to the end that you might be kept better and more promptly informed. I believe that you should receive a summary of important actions of the Executive Council and of the active committees within a few days of their meetings. Many of our officers and committee chairmen frequently attend regional and national meetings (sometimes with their expenses partially defrayed by the Society) and I believe that you are entitled to a prompt, brief summary of the meetings in which they have been involved.

Thus, I have briefly outlined certain areas of activity for our organization for the com-

ing year. Although sketchy, it is an ambitious and perhaps formidable challenge. However, we possess formidable resources: the legacy of leadership from Dr. David Goe Welton, my immediate predecessor, and those who led us before; the guiding hand, experience, and wisdom of our superb Executive Council; a cadre of intelligent and informed membership which we need to expand; and an able, dedicated, and experienced headquarters staff.

In closing, I would like to read to you some recent remarks of Albert G. Miller, M. D., the current president of the California Medical Association.

We know that the physician's voice has diminished in impact. Other members of the health team, consumers and governmental voices have grown loud and clear. But all members of the community will respond to informed and articulate leadership from the medical profession, if it is offered in a spirit of cooperation.

As individuals, the Public Practice of Medicine demands that we become involved in the socioeconomic problems besetting our own communities. We can make unique contributions to the solution of

sociological and cultural problems within our own cities. Many of us are already doing so.

If we work together, and involve others in our sustained campaign to make careful, but steady improvements in our health care system, we will succeed. But if as popular writers or others believe, our apparent goal is economic domination, cloaked in a mask and gown, then our defeat is certain. And the real losers will be the patients we serve.

I bring you a challenge for activity and involvement, especially in the problems of our society, and to utilize the resources of your medical society as a vehicle in providing solutions to certain of these concerns of our people. Earlier in my remarks I referred to our memorial service, in which we pay honor to our departed colleagues. We do, indeed, mourn their loss, but perhaps our concern should extend a bit further, as exemplified in the following quotation from a speech delivered by the late Franklin D. Roosevelt in Charlotte in September, 1936:

Mourn not the dead,
But, rather, mourn the apathetic throng;
The cowed and meek,
Who see the world's great anguish and wrong,
Yet who dare not speak!

Keeping the teeth clean tends to prevent the tooth-ache. The best method is to wash them daily with salt and water, a decoction of the bark, or with cold water alone. All brushing and scraping of the teeth is dangerous, and unless it be performed with great care, does mischief.—William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Philadelphia, Richard Folwell, 1799, p. 258.

Effectiveness of the Incentive System of Medical Care

DWIGHT L. WILBUR, M.D.*

In this modern world of IBM machines, computers, automation, superjet airplanes, space flights to the moon and ballistic missiles, science and management would seem to be in the ascendency. Yet, the very qualities and viewpoints inherent in the success of modern scientific and managerial techniques contain seeds for great disruptions in our social and economic patterns—and particularly in the area of health care.

During recent years and decades—especially since the dawn of the atomic age—many observers have pointed out that our scientific and technological progress has outstripped our capabilities for comparable advance in philosophy, sociology, ethics, and morality, and—most important of all—human relations.

Both science and management train their students and practitioners in the techniques of hardheaded, practical thinking. Major emphasis is on facts and skills, but whether fact or theory, everything must be provable and measurable.

In medicine, however, we must deal not only with scientific knowledge, facts, and skills, but also with the human personality in all its facets. In the field of health care, many crucial factors arise out of the immeasurable, intangible character of man.

The Personal Basis of Medical Care

Physicians, along with all others on the health care team, must summon up all medical, surgical, and allied services necessary to cure a disease or correct a condition. But they also must never forget that they are treating more than just a disease or a syndrome; they are dealing with a whole person—physical, mental, emotional, social, and spiritual.

The psychological aspect of the patient frequently is a major, determining factor in his recovery and his progress toward good health. A person is most vulnerable, mentally and emotionally, when he is sick. It is at these times when he feels most dependent on his physician—when he needs confidence not only in the physician's diagnostic and therapeutic skills, but also in his judgment and understanding as a fellow human-being.

As the saying goes, "healing takes place in the head and the heart."

The Motivation of the Physician

The role of the physician in the health care relationship with the patient also is psychologically based. And the role of the physician himself, as an individual, is based to a great extent on intangibles.

He is attracted to medicine as a career—rather than to an increasing number of fields that are appealing to intelligent, scientific-minded young people—because of what medicine has to offer in his attempt to achieve a full life. He barter part of his youth for ability and opportunity to sense his worth in close ministration to the health needs of his patients. If he is to be a true physician, in the finest tradition, he must have a sense of dedication and a desire to develop and use his capacities at the highest level of fulfillment.

The physician, therefore, has the added incentive of striving constantly for professional excellence, in order to best serve human needs. Unlike the artist or creative writer, who—if he chooses—can work simply for the joy of self-expression, the physician can practice medicine only in relation to other people.

While the engineer, for instance, can succeed by removing himself from the scene of work that utilizes his knowledge, the physician is most likely to fail to the degree that he removes himself from the interface with his patient.

The psychology of attracting and motivat-

Read before the Second General Session of the Medical Society of the State of North Carolina, Pinehurst, May 20, 1969.

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Home address: 655 Sutter Street, San Francisco, California 94102.

ing a good physician demands an incentive system—not just in money or even in prestige, but in the sense of accomplishment, the feeling of being of great service, of having meaningful and crucial relationships with people, and of giving of his best, basing his decisions on his professional skill and knowledge, unhampered by any other factor. All these incentives are much more real, in our modern society that takes making a living for granted, than are the practical and tangible incentives of money that the professional managers are accustomed to thinking about.

Motivation of the Patient

The patient needs motivation, too, of course. The motivation to get rid of his illness is not enough; he also needs the motivation to confront the health care process and to face the possibility of what may be wrong with him—a motive that can be enhanced greatly by a sense of confidence and reassurance in the physician.

Millions have had the traumatic experience of being cogs on the assembly belt of health service in the armed forces, and would never willingly undergo the experience again.

So, "healing takes place in the head and the heart," and no one has devised any substitute for the private, one-to-one physician-patient relationship for meeting the very real, though intangible, psychological necessities in health care.

An important point is the desire of people for free choice of physician, hospital, and time at which they get service. For example, in recent years 2½ million Britains have purchased private health insurance to keep those choices in their hands.

Fortunately, so far in this country, government recognizes that it alone cannot render care for all the people, and that a private or incentive system is absolutely essential to health care in this country.

It should be emphasized that patients will go to almost any ends to get care when they need it. When illness confronts them, they will go beyond the limits of personal or government financing or restricted programs. In other words, when life or health

is at stake, the patient or his family will sacrifice anything to bring about his recovery. Under these circumstances, quality and not economy is the prime factor in what the patient will do.

Meeting the Needs of Patients and Physicians

I think it is clear in this country that the incentive system is not only acceptable but desired by most physicians and patients. Witness the fact, for example, that in the last 25 years 168,000,000 Americans have purchased and carry some kind of private health insurance. However, we also have problems calling for positive action and improvements.

With today's unbalanced supply-demand situation in health manpower, public acceptance of the "right" concept, and the difficulty of adding quickly to the supply, the effectiveness of medicine must be its ability to respond to the situation.

First we must recognize it, define it, and identify with the needs of the community; then we must respond. For example, the American Medical Association and the Association of American Medical Colleges have asked medical schools for action to increase the supply of physicians. Have the medical schools moved fast enough or far enough?

The engine of flexibility is incentive. The problem is how to infuse incentive. If existing institutions are not "renewed" or revitalized to meet new demands, they very well might be eliminated.

The incentive system is biologically sound. The rewards of incentive—for example, food and sex—in satisfying biological urges and drives are quite clear. The same principle applies to medical care: the greater the incentive, the more satisfying the reward, the better the care given.

The Expanding Role of the Physician

But medicine has not been static. Many changes have come about in just the last generation, although critics have said that the characteristics of private medicine are collusion, monopoly, and lack of competition. Medicine must show that there are better characteristics than those.

The physician today is a healer, a counselor, a student, a rock of security in a storm for his patients, a citizen, a family man, an example of respect in his community. But most of all, he now needs to be an advocate of the people's health.

Medicine in its present complex form is not just the sum of the work done by 200,000 practicing physicians. The whole complex is much more than the sum of these individually working parts—just as our telephone system is much more than the sum of work done by the operators or the installers.

A physician attending to his patients is not meeting 1/200,000 of the total need. The total need also involves planning, direction, education, motivation, and the utilization and dissemination of new knowledge.

The physician starts with the health of all the people as his job. His work with his own patients is part of this, but only a part.

In a world in which almost all our forces move toward bigness and complex organizations—big government, big business, big labor, big religion, big pressure groups—medicine can cope with all its challenges only through effective unity of all its elements. It, too, must represent a large and cohesive entity, working as advocates of the people's health through the professional guidance of medical personnel.

Segmentation within the profession not only would relegate responsibility for the public's health to non-professionals, but it would assure a constant reduction in the ability of the individual physician to practice as well as he can. Both overattention to one's own practice and overattention to one's own segmented group are forerunners of a decline in stature and in professional ability to serve.

If we are to preserve the incentive system of health care, we must recognize clearly that medical science has become deeply enmeshed in both the health problems and the social problems of the community.

Biomedical scientists, governments, and the public are beginning to recognize that scientific accomplishments can produce mon-

umental social, economic, ethical, moral, and legal consequences. Heart transplantation and kidney dialysis are but two examples of such impact.

It has become increasingly evident, in the light of all these complex developments, that both government and medicine must be willing to adapt to change. More of us in medicine—all of us would be the ideal—must become leaders in developing and directing relevant change.

If we are responsive to public need, we can expect—or at least hope—that the public will become more responsive to our own needs. Then we will be in a better position to influence government to develop the same kind of relevancy to needs—the same kind of efficiency and continuity in rational, long-range, comprehensive health planning—that it is now expecting and demanding from us.

Conclusion

We must demonstrate that the incentive system—the private system of medical care—can meet the needs of all the people because it gives freedom of choice to the patient and the physician, and because it leads to (1) greatest patient satisfaction, (2) higher quality of care, (3) better care at less cost, (4) less regulation and control of the practice of medicine; and (5) because it is superior in every way to a system based on rigid control, with physicians on salary and under regulation by those outside the profession.

As Dean James L. Dennis of the University of Oklahoma Medical School pointed out recently: "If we wish to influence government, we can—we must—learn to play the game called 'the democratic process,' and play it with tolerance, patience, great humor and enlightened leadership."

If we are to preserve the incentive system of health care, we must improve it and strengthen it—by making it accessible and adaptable to the needs of all Americans . . . rich and poor, young and old, in the slums or out on the farm.

There is no alternative!

North Carolina State Board of Health—1968 Report

JACOB KOOMEN, M.D., M.P.H.*

It is a pleasure to present once again the report of the programs of the North Carolina State Board of Health, this time to describe the activities during the year 1968. With the increasing need for coordination and cooperation between the providers of health services, the presentation of work of the state health agency to organized medicine in a conjoint session takes on added significance.

It should be borne in mind that this report only highlights the more recent, or more important, functions of the State Board of Health, and is not intended to be a comprehensive analysis of the work of the agency. Indeed, in the interest of economy of time to deliver it, and later, of space when it is published, the many and varied activities of the agency cannot be here detailed. It is hoped, however, that not only will this commentary provide information to the practitioners of medicine in North Carolina, but will also serve to stimulate a greater acquaintance between physicians and the state and local health departments.

The Medical Society and the State Board of Health

Although the present time lends added emphasis to the cooperative relationship between organized medicine and the State Board of Health, it should be borne in mind that this collaboration is long-standing. The report to the Conjoint Session was established in March, 1893, by act of the General Assembly. The first such report was given on May 11, 1893. Thus, for three-quarters of a century, this meeting, established by law and strengthened by mutual respect, has exemplified the interrelated responsibilities of both the Medical Society and the State Board of Health.

Continuing in this historical perspective, it should be of interest to trace the evolu-

tion of the State Board of Health; by this is meant the policy-making body rather than the staff which bears the same name. The Board was established in 1877, and at that time consisted of the entire Medical Society of the State of North Carolina, which numbered 150 members from 94 counties. In 1879, however, the original act was amended to create a nine-member Board.

The present policy-making body, established under chapter 130 of the General Statutes of North Carolina, also consists of nine members, four who are elected by the State Medical Society and five appointed by the Governor. These appointments and elections are for four years and are staggered; members may be reappointed or reelected. Of those elected by the State Medical Society, Dr. James S. Raper of Asheville serves as president. The other three are Dr. Joseph S. Hiatt, Jr. of Southern Pines, Dr. Paul F. Maness of Burlington, and Dr. Howard Paul Steiger of Charlotte. Four of those Board members appointed by the Governor are for specific positions, one being a licensed pharmacist (Ernest A. Randleman, of Mt. Airy), one a dairyman (J. M. Lackey of Hidennite), one a licensed dentist (Dr. A. P. Cline, Sr., of Canton), and one a licensed veterinarian (Dr. Ben W. Dawsey of Gastonia). The fifth appointee is Dr. Lenox D. Baker of Durham, who also serves as vice-president of the Board.

The powers and duties of the Board of Health are broad and far-reaching. North Carolina has been fortunate in having on both its past and its present boards men of competence with a concern for the community, to carry out the responsibilities of one of the more important policy-making bodies in state government.

The function of the State Health Director, also established by chapter 130 of the General Statutes, is to serve as secretary to the Board (although he is not a voting member), and as chief executive of the agency to carry out the policies and regulations established by the nine-member Board. The

Read before the Conjoint Session of the State Board of Health and the Medical Society of the State of North Carolina, Pinehurst, May 21, 1969.

*State Health Director.

Request for reprints to the North Carolina State Board of Health, Box 2091, Raleigh, N. C. 27602.

State Health Director also serves in many other capacities, among them as a member ex-officio of the Executive Council of the Medical Society of the State of North Carolina. He serves on other state boards, such as the Commission for the Blind, the North Carolina Tuberculosis Sanatorium System, the Medical Care Commission, and on the boards and councils of nongovernmental organizations such as the Regional Medical Program. The State Health Director is elected or reelected by the Board, subject to the approval of the Governor, to serve for four years.

Leaving the historical aspects, it is a pleasure to report that two new positions were created in the office of the State Health Director in 1968. The full-time positions of Planning Officer and Training Officer have been established and staffed. They are expected to enhance the capabilities of the State Board of Health in these two important dimensions. Also created has been an Intra-Agency Council to give particular attention to comprehensive health planning as it affects the state public health agency. Considerable effort has been devoted to this by the Council, and through implementation of the planning process a significant improvement is expected in the delivery of public health services in the state.

Administrative Services Division

BEN EATON, Director

The Administrative Services Division, during the calendar year 1968, experienced a comparable increase in activity as reflected by other organizational units of the department. Being a "service division," any new programs or increases in function elsewhere in the department are immediately felt in this Division. Consequently, in every phase of this Division's responsibilities, extensive increases have taken place and some new duties have been assumed by the same staff.

The Personnel Section reports that the number of employees at the State Board of Health has increased to 519. Local health department employees numbered 1,693.

The Administrative Services Division is

also responsible for managing the fiscal resources of the State Board of Health. The following funds were available for public health programs:

Source of Funds	Fiscal Year Ending	
	June 30, 1968	June 30, 1969
State appropriation	\$ 6,871,342	\$ 7,120,579
Federal funds	6,475,743	6,829,549
Local appropriations	10,642,301	11,040,238
Departmental receipts	315,934	316,950
Special bedding fund receipts	52,400	52,940
Total	\$24,357,720	\$25,360,256

Another divisional function is the provision of health information to the public. The weekly radio program, "Your Health Today," provides tapes for broadcasting information about pertinent health matters to 50 radio stations across the State. Another operation is the Film Library, with a volume of 55,700 lendings of films in 1968. The public schools constitute 58 per cent of this distribution, although more than 40 non-profit and governmental agencies also utilize this resource. There is also a Public Health Library available to agency staff, local health departments, and others; this facility is continuing its reorganization, improvement, and modernization.

Another activity of the Division is that of liaison and coordination in legal matters regarding public health laws and regulations. There is an important relationship between the State Board of Health through the Administrative Services Division, and the Attorney General's Office and other state agencies. In particular, a special study has been undertaken of the new Medical Examiner Law and assistance rendered in its implementation.

Community Health Division

DR. RONALD LEVINE, Director

The Community Health Division continues to place emphasis on improving the quality of administrative leadership in our local health departments. With the ever-increasing shortage of qualified physician administrators, four local boards of health were assisted in recruiting and employing trained and experienced nonmedical public health administrators as their local health directors. Medical consultation was assured in

each instance. There is a corollary effort to increase the number of multi-county partnership arrangements, known as district health departments, wherein a single administrative unit may serve more than one county. In 1968, Wilkes, Davie, and Yadkin counties combined into a statutory District Health Department, bringing the total number of such units to 21. Three counties were added to the list of those having local government retirement benefits for their employees, bringing the total number of counties so covered to 95.

Reorganization efforts within the agency saw the creation of a Physical Therapy Section in the Community Health Division in July, 1968. This will permit the physical therapists of the State Board of Health to coordinate their functions and services, in order to present a comprehensive physical therapy program for public health. With the assistance of this Section, a training program for physical therapy assistants was developed and implemented within the state.

Also, the Nutrition Section was transferred from the Personal Health Division to the Community Health Division. In the area of nutrition, considerable public interest was stimulated in the problem of hunger and undernutrition in the United States. The staff of the Nutrition Section conducted a survey of 800 families taking part in the food stamp and donated commodity programs in order to discover why the programs were not reaching all those eligible for them and thus not accomplishing their purpose. The answers to the questions indicated that eligible individuals encountered transportation problems in getting to the supply of donated foods; that the food stamps cost too much for their limited incomes; and that fewer than 10% of the families had been instructed in food-buying, food-preparation or the value of food to health. Because of this study, Senator McGovern invited Governor Moore to testify before his United States Senate Select Committee on Hunger and Malnutrition. Mr. Charles Dunn of the Governor's office and Miss Elizabeth Jukes, chief of the Nutrition Section, testified before the Committee in December.

Sanitary Engineering Division

J. M. JARRETT, Director

Legislation adopted by the 1967 General Assembly was implemented during the year. Particular attention was given to inter-agency relationships. Work was done on the development of regulations governing the sanitation of the scallop industry, and regulations governing the sanitation of jails in connection with the revised law placing responsibility for jail inspections in the State Department of Public Welfare. Cooperation was given to the North Carolina Board of Agriculture, which had adopted the 1965 Milk Ordinance of the U. S. Public Health Service. Work has also been done on the development of proposed North Carolina-Virginia-Maryland interstate standards for the pasteurization of crabmeat. In cooperation with the State Highway Commission, it was possible to get combustion type toilets installed at the bridge tender stations throughout the state. The North Carolina Utilities Commission assisted in the revision of its bus station inspection program.

Some of the most significant activities of the Division accomplished during the year relate to the Radiological Health Program. Through this program close cooperation has been secured with users of radioisotopes and x-ray machines. Of particular importance has been the completion of comprehensive registration of all medical x-ray facilities. A data-processing system was developed for recording the findings of x-ray facility inspections, as was a complete electronic data-processing system for environmental radiation surveillance. A revision of the Medical Isotope Advisory Committee brought to this committee excellent medical and scientific resources.

The completion of a solid waste disposal survey, made possible by a grant from the U. S. Public Health Service, disclosed that solid waste produced in North Carolina amounted to 4,511,096 tons a year, or approximately one ton per person. This waste was being disposed of in 56 sanitary landfills and 422 open dumps at an estimated cost of \$18,899,016. Considerable interest in this matter has been shown by citizens

throughout the state, particularly by municipal and county officials. Progress is being made in developing proper garbage and refuse disposal programs.

North Carolina's community water supply problem remains one of the most urgent areas of concern because of the rapid expansion of fringe areas, subdivisions, mobile home parks, and other developments. There are now 1,666 municipal, community, institutional, trailer parks, sanitary district, and state and roadside park water supplies under supervision. During the year one of the worst droughts in 60 years was experienced. A number of towns suffered critical water shortages, and others were required to take precautionary measures.

Personal Health Division

T. D. SCURLETIS, Director

In an agency reorganization measure, the Home Health Services program was transferred from the Community Health Division to the Personal Health Division and was assigned to the Chronic Disease Section. Through the operation of this program, continued efforts are being made to upgrade and expand existing home health programs in our communities and to establish new ones. This is a part of the spectrum of health services in North Carolina that has been generally lacking and that remains an important area for further development.

The Chronic Disease Section, through a special federal contract, has been working jointly with the University of North Carolina School of Medicine and Duke University Medical Center in planning a kidney program for the State of North Carolina. The development of plans for this program involves many aspects, including dialysis needs, factors regarding transplants and donors, as well as possible methods for establishing and funding a service program throughout the state.

The Health Insurance Benefits Section shifted emphasis from its continuing responsibility for certification of facilities to intensified efforts to provide consultation to facilities newly applying to participate in Medicare, and to assist certified facilities to

correct deficiencies. The single most important area for consultation in 1968 was that of utilization review. Six workshops on improving utilization review committee functions were held across the state. At the end of 1968 the following facilities were certified for participation in Medicare: 153 hospitals, 47 extended care facilities, 12 independent laboratories, and 18 home health agencies.

The Nursing Home Section, which is charged with the responsibility of licensing nursing homes under State Board of Health regulations, ended the year with 70 licensed nursing homes and 34 licensed combination homes (those providing both nursing home care and rest home or home for the aging services), representing 5,813 nursing beds and 1,639 resident beds. This totals 104 facilities in 46 counties. Seven new facilities were licensed, 15 sets of blueprints and specifications were approved, and 12 projects were under construction at the end of the year. In addition, the Section was involved in assisting with the development of a training program for nursing home administrators.

The Metabolic Screening Program of the Maternal and Child Health Section, in cooperation with the Laboratory Division, has tested over 90 per cent of all newborns in North Carolina in 1968. Six PKU patients were identified, and the appropriate treatment given, which should prevent the retardation encountered in this disease. The Developmental Evaluation Clinics, also operated by the MCH Section, saw a 42% increase in patients served, to a total of 3,181. Family Planning Clinics served 21,140 patients in 1968, a 25% increase over the previous year. In addition, a central genetic counseling program concept, as authorized in the 1967 General Assembly, was begun July 1, 1968, utilizing the University of North Carolina as the focus for development. This highly specific type of consultation has long been needed and generally unavailable to the citizens of North Carolina.

Epidemiology Division

MARTIN P. HINES, M.D., Director

In late 1968 the policy-making Board of

Health reviewed a general revision of the Communicable Disease Control Regulations and subsequently approved the regulations which are now in effect throughout the state.

The year 1968 saw a number of significant activities in the field of epidemiology. Over 75,000 doses of measles vaccine were distributed to county health departments. September, 1968 was the first month in which no cases of measles were reported since the disease was made reportable in North Carolina. Also, the staff of the Epidemiology Division assisted in a field trial of rubella vaccine in Wake County, which has national interest as being one of the important preliminary activities in the development of an approved rubella vaccine.

The year 1968 will also be remembered as an epidemic year for influenza, as a result of the introduction of a Hong Kong influenza virus strain in the state and nation. One of the functions of the state health agency is to assist in the immunological identification of such outbreaks and to try to trace the epidemiological pattern in the population.

In the area of Venereal Disease Control, the U. S. Public Health Service project for the early identification and prevention of the spread of syphilis was continued during 1968, and the decline in reported cases was continued for the fourth consecutive year. Gonorrhea, however, is increasing, with little expectation for control in the immediate future. The provision of drugs and treatment for those unable to pay is a further function of the Epidemiology Division.

The Section on Public Health Statistics is an important part of the Epidemiology Division. The staff of this Section provided needed statistical data to state, regional, and local organizations engaged in comprehensive health planning, including the Regional Medical Program. Efforts are being made to make a gradual transition to a computer-oriented system of data-processing for speed and flexibility in handling of statistical information.

In the field of occupational health, epidemiological studies of specific industrial populations were initiated, utilizing medical consultants at Duke University and the Uni-

versity of North Carolina. Studies of phosphate workers for fluorosis and textile workers for byssinosis were carried out. Measurements of industrial noise exposure were made in selected industries, and the application of new safety standards for noise indicated that hazardous levels exist. Pneumoconiosis continues to be a problem in North Carolina. A comprehensive occupational health bill was drafted for introduction in the 1969 General Assembly which, if enacted, will be the first of its kind in the nation.

In the Accident Prevention Section, a Driver Medical Evaluation Program was established in cooperation with the State Medical Society and the Department of Motor Vehicles. The program is supported by a grant from the Department of Transportation. Also, several courses for ambulance attendants were held in cooperation with the Department of Community Colleges. The division director continues to represent the State Board of Health on the Governor's Highway Safety Program. Special attention was given to the development of highway safety standards having to do with emergency medical services and the medical aspects of driver licensing during the year 1968.

A Pesticides Investigative Unit was established to study the human aspects of the pesticides problem. More information about this will be forthcoming from the studies of the unit.

Laboratory Division

DR. LYNN MADDRY, Director

One of the many activities of this division is the distribution of biological products, such as polio, smallpox, and rabies vaccines, as well as the maintenance of stocks of biological materials which are little used and hard to get in an emergency, such as diphtheria and tetanus antitoxins. The Laboratory Division also conducts a certification program for all laboratories which perform serological tests for syphilis required by the North Carolina marriage law, all laboratories examining milk for interstate shipment, and all laboratories examining water used on

common carriers engaged in interstate traffic.

One of the laboratory services is the monthly examination, required by law, of every public water supply in the state to determine if the water is fit for human consumption. The activity was one of the original services provided when the Laboratory Division was first established, and it remains one of the most important ones performed. At present there are over 1,700 public water supplies on the mailing list to receive monthly samples, and new ones are being added at the rate of over 200 per year.

An additional continuing service is syphilis serology, and today over 350,000 specimens are being examined each year.

These are representative examples of the work of the Laboratory Division in protecting the health of the citizens of North Carolina.

One of the most valuable of the Laboratory's other activities is the training that it gives its own staff members, the state's venereal disease epidemiologists, and many laboratory workers from local health departments, hospitals, and private laboratories, in an effort to improve laboratory services all over the state. The Laboratory also cooperates with Holding Technical Institute in Wake County, in giving some of their certified laboratory assistant students on-the-job training in microbiology. The Division also participates in the industrial cooperative training program of local high schools.

Dental Health Division

E. A. PEARSON, D.D.S., Director

The regular services of the Dental Health Division continue to reach many school children in North Carolina to provide necessary dental examinations, referrals and services. The staff in 1968 treated 20,505 indigent school children with preventive and corrective treatments. In addition, 28,605 were referred to their family dentists.

Fluoridation of community water supplies remains one of the most effective preventive measures for dental diseases. Of those persons in North Carolina who are served by municipal water supplies, 74.5% are drinking fluoridated water. Last year, four addi-

tional cities in North Carolina began fluoridation of their municipal water supplies. However, over half the population of North Carolina reside in areas which are not served by municipal water supplies and do not benefit from community water fluoridation. The Dental Health Division has, therefore, turned to other means of fluoridation as a method of protecting rural children against dental cavities. The Division, in cooperation with the Laboratory and Sanitary Engineering Division of the State Board of Health, implemented the fluoridation of five rural school water supplies during 1968. Also, special studies are being conducted, such as that to test the effectiveness of two topical fluoride solutions. This has been completed and the data are now being tabulated and analyzed. The study of the effectiveness of fluoride supplements in reducing dental decay was continued for the sixth year of its seven-year duration. A new 12-year study, intended to determine the optimum level of fluoridation for rural school water supplies, was begun in 1968 in cooperation with the U. S. Public Health Service.

A special summer program using senior dental students from the University of North Carolina School of Dentistry, under the supervision of staff dentists, was continued resulting in the provision of services to 2,130 children. This program also provided a unique educational experience for the fifteen dental students who participated.

Committee on Postmortem Medicolegal Examinations

KENNETH M. BRINKHOUS, M.D.* Chairman
and

R. PAGE HUDSON, JR., M.D.†

The General Statute adopted by the 1967 North Carolina Legislature providing for a statewide system of postmortem medicolegal examinations became effective January 1, 1968. The Committee on Postmortem Medicolegal Examinations was dissolved as of that date and submitted its final report in March. Dr. R. Page Hudson, Jr., formerly of the Medical College of Virginia, was appoint-

*From the Department of Pathology, University of North Carolina School of Medicine.

†Chief Medical Examiner, State of North Carolina.

ed Chief Medical Examiner, effective September 1, 1968. In the interim period, the State Health Director requested the various county medical examiners to continue to perform their duties until new appointments, or reappointments, could be made.

The toxicology laboratory of the University of North Carolina School of Medicine continued to provide toxicological services to the state, under the direction of Dr. Ralph H. Wagner, toxicologist. During the year 1968, 444 cases were examined, with 1,464 analyses. (Note the growth of this service which began in 1958 with 25 cases and 46 analyses).

With the arrival of Dr. Hudson efforts were begun on September 1 to carry out the service, teaching and research aspects of the State Medical Examiner System. All counties were contacted through the county commissioners to familiarize them with the existence of the new statutes, and the medical societies of approximately 50 counties were notified by letter. Communication was also established with the Institute of Government, State Funeral Directors' Association, State Society of Coroners and Medical Examiners, the State Bureau of Investigation, and other organizations. Many personal appearances were made by the Chief Medical Examiner before county medical societies and service clubs.

The first county, Iredell, came into the statewide system on November 1, 1968. A total of seven counties had become active in the system by the end of December. Seven other counties were approved during December to begin in January, 1969. Serving the counties were 22 physician medical examiners, appointed through December, with 22 others to begin duties in January. To provide consultation in pathology, two regional pathologists were appointed to serve during 1968; 12 others were appointed in December to begin in January. From those counties, reports on 73 medical examiner cases were received through December 31. Nine autopsies were performed by the regional pathologists and approximately 30 by the Chief Medical Examiner. Consultation was also given in other cases.

The need, mechanics, and effect of the system was discussed at the annual meeting of the State Society of Coroners and Medical Examiners. Efforts were made to obtain the services of a full-time forensic toxicologist, to increase the staff of toxicology technologists, and to obtain an administrative officer.

In addition to his duties as Director of the State Medical Examiner System, the Chief Medical Examiner also serves as a teaching resource for the medical schools in the state. In the area of research, a grant was obtained to commence study of the presence and effect of certain food additives in human tissues.

Summary

The preceding report is a synopsis of several activities of the State Board of Health, and is by no means an exhaustive list of the agency's functions. It is intended merely to highlight the work of the Board and to call attention to some of many programs that are being conducted.

Throughout the operation of the State Board of Health the element of cooperation and coordination with the private practice of medicine, voluntary agencies, teaching institutions, other state agencies, and the public at large, is emphasized. The provision of health services, though often of a highly specialized nature, cannot be the result of isolated and unrelated activities. Increased consciousness, especially on the part of the public, of the need for developing a continuous spectrum of health services places great emphasis on the cooperative elements of health services administration. Preventive, curative and rehabilitative resources must be blended into a smoothly functioning, coordinated system of services. To this end the State Board of Health renews its commitment to work in conjunction with all providers of health services, especially with physicians in private practice. Physicians are urged to establish a close relationship with their local health department and with the State Board of Health for the provision of better health care for the citizens of North Carolina.

Pediatric Allied Health Workers in North Carolina

EARL SIEGEL, M.D.*

Pediatricians, along with other physicians, feel keenly the critical health manpower shortages facing this country. Since World War II we have seen a considerable expansion in this country's child population (0-15 years of age). The change has been associated with a marked decline in the number of general practitioners and with only a relatively limited increase in the supply of pediatricians. Stewart and Pennell¹ found that between 1949 and 1962 the ratio of general practitioners and pediatricians to total children aged 0-15 dropped almost 50%. However, little is known about how practitioners use their time or about who does what, in general or pediatric practice. Bergman and colleagues,² and more recently Haggerty and Hessel,³ systematically studied the content of pediatric office practice in Seattle, Washington and Rochester, New York. It is apparent that a substantial portion of the care which physicians currently administer to children might be more appropriately assumed by other personnel.

Purpose and Method

This paper deals with the use of allied health workers in the offices of North Carolina pediatricians and documents the opinions of the physicians regarding the possible delegation of various tasks to such workers and their possible responsibilities in the future. The report is based on the responses to a questionnaire mailed to all members of the American Academy of Pediatrics, in the fall of 1967, by the Academy's Subcommittee on Pediatric Manpower, Council on Pediatric Practice.⁴ Thirteen per cent of North Carolina Fellows did not respond to the mailing, but one-third of these were known to be nonpractitioners.

Results

Table 1 shows the current positions of

Read before the North Carolina Chapter of the American Academy of Pediatrics and the North Carolina Pediatric Society, Pinehurst, November 22, 1968.
Professor and chairman, Department of Maternal and Child Health and the Associate Clinical Professor of Pediatrics, University of North Carolina, Chapel Hill, N. C. 27514.

those who did respond to the questionnaire. For the most part there are few real differences between pediatricians in North Carolina and those of the United States as a whole.

Table 1*
Current Pediatric Position

Current Position	N. C.	U. S.
	Percent (N=122)	Percent (N=5798)
Practitioners	71	73
Teachers-Researchers	19	12
Administration-Public Health	6	5
Other	4	10
	100	100

*American Academy of Pediatrics Survey of Allied Health Worker Utilization.

Almost three-fourths of them are practitioners in solo, group, or partnership practice. In Table 2 we note that the great majority of the North Carolina respondents practice general pediatrics; only a relatively small proportion combine general and subspecialty

Table 2*
Current Pediatric Practice

Type of Practice	N. C.	U. S.
	Percent (N=87)	Percent (N=4208)
General pediatrics (only)	85	79
Combination general-subspecialty	15	17
Limited to subspecialty	0	3
	100	100

*American Academy of Pediatrics Survey of Allied Health Worker Utilization, 1967.

practice. None of these practitioners indicated that their practice was limited to a subspecialty.

A substantially larger proportion of North Carolinians practice in pediatric groups as compared with the United States as a whole, but a much smaller proportion are in multi-specialty groups (Table 3). Group practice apparently lends itself to more flexibility and may foster use of allied health workers.

More than three-fourths of North Carolina pediatricians use registered nurses in their practice, which is more than the proportion for the United States as a whole (Table 4). About two-fifths currently use some type of pediatric assistant, and a little more than

Table 3*

Type of Practice Setting		
Type of Setting	N. C.	U. S.
	Percent (N=87)	Percent (N=4208)
Pediatric group	63	41
Solo	28	40
Multispecialty group	8	19
Not answered	1	—
	100	100

*American Academy of Pediatrics Survey of Allied Health Worker Utilization, 1967.

one-fifth employ a licensed practical nurse. Relatively fewer North Carolina than United States pediatricians employ a laboratory technician in their practices. Secretaries are so widely used that they are not shown in the tables. The above categories are not mutually exclusive since obviously a pediatrician might use several different types of allied health workers.

Current policies and practice

The use of allied health workers is dependent upon those tasks which physicians are able or willing to delegate. The questionnaire listed 40 specific tasks which are characteristic of those carried out in pediatric office care. In Table 5 the technical, clerical, and laboratory tasks "most frequently" performed by allied health workers have been separated from tasks involving patient care. The former tasks are ranked according to the frequency with which they are delegated by the North Carolina respondents. It is not surprising that such tasks as inventory and supply, weighing, and insurance forms are almost always delegated. However, there remains a group of technical tasks such as body measurement and various laboratory and screening procedures which a large proportion of physicians say they still do themselves.

In Table 6 are listed the patient care tasks carried out by allied health workers in North Carolina. In this table no comparisons are made with the United States responses. Patient care tasks *now delegated* are found in the right-hand column; they are contrasted with the respondent's favorable *opinion* regarding delegation of a specific task. In interpreting these data, it should be recognized

Table 4*

Types of Allied Health Workers Employed		
Type of Worker	N. C.	U. S.
	Percent (N=87)	Percent (N=4208)
Registered nurse	76	57
Medical/pediatric assistant	41	41
Licensed practical nurse	22	25
Laboratory technician	24	32

*American Academy of Pediatrics Survey of Allied Health Worker Utilization, 1967.

Table 5*

Technical-Clerical Tasks Performed by Allied Health Worker

Task	N. C.	U. S.
	Percent (N=87)	Percent (N=4208)
Inventory/Supply	97	92
Weighing	97	87
Insurance Forms	93	85
Urinanalysis	80	68
Hemoglobin	80	59
Vision Screening	79	65
Body Measurements	78	76
Immunization	70	58
Blood Count	66	45
Parenteral Drugs	59	50
Hearing Screening	35	37

*American Academy of Pediatrics Survey of Allied Health Worker Utilization, 1967.

Table 6*

Current Office Patient-Care Tasks Performed by Allied Health Workers in North Carolina Compared with Pediatric Opinion Regarding Delegation

Task	(N=83)	
	Percent of Pediatricians Favoring Delegation	Percent of Pediatricians Now Delegating (N=83)
Information/immunization	100	54
Information/child care	95	24
Interpreting instructions	89	30
Family/social history	87	58
Telephone/child care	84	52
Telephone/minor medical care	83	71
Past medical history	80	48
Advice/feeding-dev.	68	25
Int. history/well child	66	19
Advice/minor medical care	65	30
Int. history/sick child	51	19
Present illness history	46	24
Advice/school child	43	12

*American Academy of Pediatrics Survey of Allied Health Worker Utilization, 1967.

that the task descriptions in the tables are abbreviated. For example, in the questionnaire itself, "Family/Social History" was described as, "An allied health worker takes and records routine elements of the family

Table 7*

Potential Job Market for Hiring Allied Health Workers

Respondent Opinion	N. C.	U. S.
	Percent (N=87)	Percent (N=4208)
Would hire full time	44	41
Would not hire†	41	34
Would hire part time	13	22
Not answered	2	3
	100	100

*American Academy of Pediatrics Survey of Allied Health Worker Utilization, 1967.

†Some respondents already have satisfactory arrangements.

and social history as a regularly assigned duty.”

Examination of the right-hand column discloses a somewhat different picture than that noted for the technical, clerical, and laboratory tasks. In the case of only four tasks—(1) “provision of telephone advice on the handling of minor medical problems,” (2) “the taking and recording of routine elements of the family and social history,” (3) “providing information regarding after-care of immunizations and vaccinations,” and (4) “providing telephone advice on routine questions of child feeding and care”—do more than 50% of pediatricians currently delegate responsibility to allied health workers. Almost half of the pediatricians said that they now have allied health workers “take and record routine elements of the past medical history.” For the above questions about patient care tasks to be answered positively, the tasks had to be a part of the allied health worker’s regularly assigned duties. Less than a third of the pediatricians currently delegate any other patient care tasks.

Although not shown in the table, there is more delegation of tasks in North Carolina than in the United States as a whole. When one contrasts what is now being delegated (the right-hand column) with the way the respondents indicated things “could and should be done,” (the left-hand column), it is found that for virtually every task there is a substantial discrepancy between what is now being done and what it is felt “could and should be done.” These differences are especially striking for routine tasks. Even for those which are not routine, four-fifths

Table 8*

Pediatric Opinion Concerning Effect of Greater Utilization of Allied Health Worker

		N. C.	U. S.
		Percent (N=122)	Percent (N=5798)
Effect on Practice	Quality		
	Volume		
Improvement	Increase	54	40
None	Increase	21	15
Deterioration	Increase	18	17
Improvement	None	11	20
Deterioration	No change	6	6
		100	100

*American Academy of Pediatrics Survey of Allied Health Worker Utilization, 1967.

to almost one-half of the respondents favored delegation. Not listed are the responses to the items relating to examination of well and sick children. Only 19% and 16% of the respondents reacted favorably to delegation of these tasks.

Almost half of North Carolina’s pediatricians would hire, within two years, a full-time, well-trained allied health worker to perform the patient-care duties listed (Table 7); 13% indicated that they would hire an allied health worker part time; 41% indicated that they would *not* hire such a person, but some of these practitioners already had satisfactory arrangements.

Table 8 lists the personal opinions of the respondents regarding what might happen if greater utilization were made of allied health workers. The North Carolina pediatricians responded somewhat more favorably than those for the United States as a whole. More than half of the former thought that the quality and volume of their practices would increase. About a fifth thought that there would be no improvement in quality but that there would be an increase in volume. Eighteen per cent predicted a deterioration in quality but an increase in volume. Only 6% thought there would be a deterioration in quality and that no additional children could be seen.

Opinions regarding obstacles to the greater use of allied health workers in pediatric care are found in Table 9. The largest, most frequently mentioned “very serious obstacle” is the lack of trained workers. Insurance coverage and worker supervision are the next most frequent obstacles cited; worker

Table 9*
Obstacles to Greater Use of
Allied Health Workers in Pediatrics

"Very Serious" Obstacle	N. C.	U. S.
	Percent (N=87)	Percent (N=4208)
Lack of trained workers	65	56
Insurance coverage	30	35
Worker supervision	22	21
Worker turnover	17	22
State medical practice laws	16	22
Patient load increase	15	—
Doctor-patient relations	14	14
Lack of office space	10	9
Parental nonacceptance	9	10

*American Academy of Pediatrics Survey of Allied Health Worker Utilization, 1967.

turnover, state medical practice laws, increase in patient load, doctor-patient relations, lack of office space, and parental acceptance were also mentioned, but by less than a fifth of the respondents.

Discussion

The data presented may be considered a mandate from a large group of North Carolina pediatricians for the training of allied health workers to be used in their practices. My interest in the provision of more sensible, more effective, and more professionally satisfying care for children is not that of an arm-chair planner; it dates back more than eight years, when I left private practice. By far the most salient reason for leaving was a conviction that my pediatric skills and training were being inappropriately used. In 1960 at Berkely, California, we designed and subsequently described a greatly expanded role for public health nurses in the provision of well-child care and in the management of minor illnesses.⁵ At approximately the same time the North Carolina State Board of Health was engaged in the creation of nurse screening and pediatric supervisory clinics.⁶ In Colorado, in the early 1960s, child health nursing conferences were being developed.⁷

The time is now obviously ripe for the rapid elaboration of programs to train allied health workers for the delivery of pediatric care in private and public settings. The most widely known of such endeavors is the pediatric nurse-practitioner program developed by Drs. Henry Silver and Loretta Ford.⁸

They formalized the training described earlier by others. More recently, Dr. Silver has proposed a new professional category of allied health workers—the "pediatric associate." Authorization to license this type of worker is now being considered by the Colorado state legislature. The five-year program to prepare the pediatric associate will be offered by the University of Colorado School of Medicine.

The North Carolina scene has been marked by increasing activity in this area. The Division of Allied Health Sciences and the Department of Pediatrics at the Bowman Gray School of Medicine are also developing a "pediatric associate" program. Qualified candidates who have completed the equivalent of two years of college work, with emphasis on the biological sciences, will be admitted to the two-year program now being planned.⁹ Duke University School of Medicine, in collaboration with the State Board of Health and several practitioners, offered a brief training program for a small number of public health nurses in the fall of 1968. It provided the nurses with additional skills which would enlarge their roles in the provision of maternity and pediatric care.¹⁰ The University of North Carolina Departments of Pediatrics and Maternal and Child Health are moving in a similar direction.

A variety of approaches utilizing different training settings and candidates for new roles in the provision of pediatric care need to be developed. However, it is our belief that the nursing profession should be involved much more productively than it has been in the past. By expanding nursing responsibilities, a more orderly transition will most likely evolve. Nurses, who already have a basic understanding of child development and the social and cultural factors associated with health and disease, are ideal candidates for further clinical training so that they can deliver primary medical care to children under both private and public auspices. When the programs under way for training nurses become better developed, we will recruit many presently inactive nurses, since the new role will be much more challenging to them.

We can no longer ask a nurse to be our "handmaiden" and office or clinic manager. We must turn the latter roles over to clinic aides and assistants and allow for a more autonomous role for the nurse. The pediatrician's role then becomes one of a consultant. He respects her special knowledge and skills and fosters her professional growth and development. He then will have more time to cope adequately with children who present diagnostic problems, those with chronic illnesses, and those who must be hospitalized. Further, he will be able to pursue in depth, if he wishes, a pediatric subspecialty. The time-consuming evaluation and management of children with complex clinical problems could be approached and followed without the excessive involvement of routine care.

Conclusion

Career satisfaction, health manpower problems, and, most importantly, the needs of families with young children demand that physicians consider more efficient utilization of allied health workers. In so doing, physicians will be able to invoke their education, training, and commitment more appropriately. A physician can no longer try to do everything and be everything, ritualistically laying his hands on each patient and looking wise. He must, however, be willing to relin-

quish and transfer to others a portion of his authority; for their part, nurses are accepting it along with the responsibilities. Thus better health care will be available and accessible to many more children than currently experience it.

Acknowledgment

The author gratefully acknowledges the data provided by Drs. A. Yankauer, J. Connelly and J. Feldman, which form the basis for this paper. The data were collected on behalf of the Subcommittee on Pediatric Manpower of the American Academy of Pediatrics, Council on Pediatric Practice.

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I lately saw some very surprising effects of worms in a girl about five years of age, who used to lie for whole hours as if dead. She at last expired, and, upon opening her body, a number of the teres, or long round worms, were found in her guts, which were considerably inflamed; and what anatomists call an intus susceptio, or involving of one part of the gut within another, had taken place in no less than four different parts of the intestinal canal.—William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Philadelphia, Richard Folwell, 1799, p. 262.

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A WORD OF GENERAL APPRECIATION

To All Officers, Councilors, Commissioners and other members of the Executive Council, Committee Chairmen; to all members of the Headquarters Staff; and to all the Other Society Members who participated in the work of the Society during the past year:

I wish to express herewith my heartfelt appreciation to each of you for your splendid spirit of cooperation and for your devoted efforts in behalf of the program of the Medical Society of the State of North Carolina during the 1968-1969 year. Your interest and willingness to put your shoulders to the wheel and work together for the common good made this an eventful year.

I am sure that you will render the same outstanding support to President Edgar T. Beddingfield and I urge you to serve in any capacity which he may request.

May you all have a very pleasant summer.

DAVID GOE WELTON, M.D.

* * *

SALUTE TO JIM BARNES

Executive Director James T. Barnes was featured in a warm, well-deserved tribute as "Society Stemwinder" in the May-June issue of *PR Doctor*.

Citing his broad experience in public welfare, rehabilitation, rural health and mental health services, before and since he assumed his awesome responsibilities as top administrator of the state's medical profession 22 years ago, *PR Doctor* states:

"Jim Barnes . . . is probably one of the 'most prepared' non-physicians within organized medicine today, not only in terms of length of service, but in all areas of community health and citizenship."

Even Tar Heel doctors, who would certainly agree with the foregoing estimate, might be surprised at the diversity of his many honors and offices: "President of the

Medical Society Executives Association (now AAMSE), Director of the Country Doctor Museum, President of the State Health Council, Director of the State Conference for Social Service, President of the State Association of Superintendents of Public Welfare, and Director of the State Medical Journal Advertising Bureau, to name only several."

Looking for the secret of his "fast-paced civic life," *PR Doctor* ventures a guess:

"A Tar Heel, he's light on his toes, too—both he and his wife, Sadie, are Arthur Murray 'medalist' dancers."

* * *

THE WIDOWER

An old story describes a widower being comforted on the way back from the funeral by a friend, who tells him, "Don't worry so much about being lonely—you're a young man and can remarry if you want to," and gets the reply, "Sure, but what am I going to do tonight?" This implied heartlessness (lots of wives imagine their husbands holding similar hidden sentiments) gets no support from an article in the March 22, 1969 *British Medical Journal*. Parkes, Benjamin and Fitzgerald studied 4486 widowers over age 55, and found that during the six months following the deaths of their spouses there were 40% more than the expected number of deaths among these bereaved men. As time passed, their mortality rate returned to that of men whose wives continued to live.

Thus the Parkes paper lets us put the lie to women who would accuse men of indifference to their wives' passing and alerts us to look for trouble when an elderly man becomes a widower. Now one looks forward to a study describing the immediate effects of widowhood. The gender of the object of the old story may have to be changed before long.

Sir John Pringle observes, that though this disease (scabies) may seem trifling, there is no one in the army that is more troublesome to cure, as the infection often lurks in clothes, etc. and breaks out a second or even a third time. The same inconveniency occurs in private families, unless particular regard is paid to the hanging or cleaning of their clothes, which last is by no means an easy operation.—William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Philadelphia, Richard Folwell, 1799, p. 284.

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Particular note should be taken of the authorization of the House of Delegates of a Commission form of organizational activity and that all Committees, excepting Committee on Nominations, Committee on Negotiations, and Mediation Committee are segregated under the respective Commission in which the function of the Committee logically rests. This will tend to eliminate overlapping and duplication in activity programs and result in coordination of the work of the Society in a manner to lessen the work of the delegates in the Annual Meeting of the House of Delegates.

(The President, Secretary and Executive Director of the Society are ex officio members of all committees and, along with the Commission Chairman, should receive notice of meetings, agenda and minutes of Committee meetings during the activity year.)

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3. Committee on Appalachia and State of Franklin (11) VII-1

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- 16. Committee on Community Health (Rural and Urban) (18) V-2**
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- 25. Committee on Finance (3) (7 Commissioners) (2 Vice President) I-1**
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28. Committee to Work with North Carolina Industrial Commission (17) IV-3

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29. Insurance Industry Committee (16) IV-4

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31. Committee on Legislation (3) (President and Secretary) (Consultants) V-5

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32. Committee on Marriage Counselling and Family Life Education (13) VI-4

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33. Committee on Maternal Health (14) VI-5

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34. Mediation Committee (5) (1st Five Past Presidents) VIII

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35. Committee on Medical Aspects of Sports (6) (2 consultants) VI-6

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37. Medical-Legal Committee (9) V-6

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38. Committee on Medicine and Religion (10) (7 consultants) VI-7

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39-B Mental Retardation & Children's Services (18)

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COMING MEETINGS

Third Annual Carolina Hospital Pharmacy Seminar—University of North Carolina School of Pharmacy—Chapel Hill, September 6-7.

Symposium on Medicine and Religion—University of North Carolina School of Medicine, September 8-9.

North Carolina and South Carolina Ophthalmology and Otolaryngology Society, Joint Meeting—Ocean Forest Hotel, Myrtle Beach, South Carolina, September 14-16.

Duke University Medical Center, Cardiovascular Workshop—Durham, September 24.

William S. Hall Psychiatric Institute, Postgraduate Program on Human Sexuality—Columbia, South Carolina, October 29-30.

North Carolina Chapter, American Academy of Pediatrics, and the North Carolina Pediatrics Society, Annual Meeting—The Carolina, Pinehurst, November 21-22.

NEWS NOTES FROM THE DUKE UNIVERSITY MEDICAL CENTER

Workshop on Valvular Heart Disease

The Cardiovascular Division of the Department of Medicine, Duke University Medical Center, Durham, N. C., will hold the first of a series of Cardiovascular Workshops on September 24, 1969, 1:00-9:45 p.m. This program is designed to give the busy internist and cardiologist, in a half day, an overview of practical aspects of a specific broad subject.

The first Cardiovascular Workshop will be devoted to "Acquired Mitral and Aortic Valvular Heart Disease." It will include a practical review of the clinically pertinent hemodynamics, as well as the history and physical findings. The participants will gain practical experience in auscultation (with individual stethophones) and interpretation, in small groups, of the x-ray and electrocardiogram. The indications for, and results of, surgery will be discussed by a panel. Informality and opportunities for discussions with the faculty will be encouraged.

Dr. W. Proctor Harvey, professor of medicine, and director of the Division of Cardiology, Georgetown University Hospital, Washington, D. C., will be the visiting professor. Other participants will include Drs. E. Harvey Estes, Walter L. Floyd, Henry D. McIntosh, James J. Morris, Jr., Edward S. Orgain, Robert H. Peter, and Robert E. Whalen of the Department of Medicine; Drs. David C. Sabiston, Jr., and W. Glenn Young, of the Department of Surgery, and Dr. James T. T. Chen of the Department of Radiology.

The program will be limited to 50 physicians. A fee of \$30.00, payable in advance, includes the cost of an informal reception and dinner with the faculty. Adjournment will be promptly at 9:5 p.m. to permit physicians to return home; however, if pre-

ferred, reservations at a nearby hotel will be available.

For further information, write Henry D. McIntosh, M.D., Chief, Cardiovascular Division, Department of Medicine, Duke University Medical Center, Durham, N. C. 27706.

* * *

Dr. Nicholas G. Georgiade, professor of plastic and maxillofacial surgery at the Duke University Medical Center, has been elected to the American Board of Plastic Surgery.

The 18-man board is the examining and certifying body for the specialty of plastic and maxillofacial surgery in the United States. Maxillofacial surgeons treat surgical conditions of the head and neck, exclusive of the brain.

Georgiade is known internationally for his work. In the past few weeks he has presented some of his original work in the management of oro-facial deformities at the International Congress on Cleft Palate in Houston and scientific papers at the American Society of Maxillofacial Surgeons and the American Association of Plastic Surgeons in San Francisco.

Past president of the American Society of Maxillofacial Surgeons, Georgiade is author of more than 115 scientific papers. He is editor of a forthcoming text on maxillofacial injuries and is contributing author to texts in plastic surgery.

He is a consultant to the National Institutes of Health, the Veterans Administration, the U. S. Army and U. S. Air Force, and he is a member of the advisory committee in plastic and maxillofacial surgery to the American College of Surgeons.

* * *

Duke University's Board of Trustees has authorized endowment of a chair honoring the Duke School of Medicine's first chairman of obstetrics and gynecology.

It will be known as the F. Bayard Carter Chair of Obstetrics and Gynecology.

Dr. Carter has been engaged in private practice here since retiring from Duke on his 70th birthday last year. In 1964 he gave up the chairmanship of the Department of Obstetrics and Gynecology which he had headed since 1931.

The first gifts toward establishing an endowment for a Carter chair were made several years ago by members of the Bayard Carter Society of Obstetricians and Gynecologists, formerly called the Nick Carter Travel Club. The society of nearly 70 former house officers who worked and studied under Dr. Carter meets annually and every third year at Duke.

Dr. Carter's wife, Mrs. Harriet Cook Carter, an active civic leader in Durham and co-founder of the Duke Hospital Auxiliary, died Oct. 11. In her honor this spring, the Duke School of Nursing instituted the annual Harriet Cook Carter Lectureship.

* * *

W. W. Lowrance, Director of Planning and Development for Memorial Mission Hospital, Asheville, N. C., has been appointed Director, Hospital Divi-

sion, of the Association for the North Carolina Regional Medical Program.

The appointment was announced by Dr. Marc J. Musser, executive director of the Regional Medical Program from the state offices in Durham.

Mr. Lowrance, who also will be on the administrative staff of Duke University, assumes his new position about July 1. The association, established in 1966, is composed of Duke University, the University of North Carolina, Wake Forest University, and the Medical Society of the State of North Carolina. More directly involved are the three medical schools of these universities and physicians throughout the state.

The association is interested in all aspects of health but is more specifically concerned with the areas of heart disease, cancer, stroke, and related diseases.

Lowrance is a Davidson College graduate, and received his hospital training in the Program in Hospital Administration at Duke University Medical Center.

He is a fellow of the American College of Hospital Administrators, a member of the American Hospital Association, North Carolina Hospital Association, and other health organizations. He is president of the North Carolina Hospital Association, having taken office at the annual meeting at Grove Park Inn in June. He is a member of the Board of Directors of North Carolina Blue Cross and Blue Shield, and serves as a member of the Board and Executive Committee of the United Health Services of North Carolina.

* * *

A symposium entitled "Molecular Aspects of Neural Transmission" drew physicians and researchers from medical institutions throughout this country and abroad to the Duke University Medical Center recently.

It was the fifth annual symposium sponsored by the Research Training Program in Sciences Related to the Nervous System at Duke.

Besides members of the Duke medical faculty, those presenting papers came from Dalhousie University in Halifax, Nova Scotia, the University of Birmingham (England) Medical School; the Albert Einstein College of Medicine; St. Elizabeth's Hospital in Washington, D. C.; Rockefeller University; the National Institute of Mental Health; the University of Pennsylvania; City of Hope Medical Center in Duarte, Calif.; Harvard Medical School; and Johns Hopkins University.

* * *

Duke University Medical Center has promoted two faculty members and appointed another.

Promoted to associate professor of medicine and associate professor of biomathematics in the Department of Community Health Sciences was Dr. Howard K. Thompson, Jr.

A graduate of Yale University, Dr. Thompson received his M.D. degree from the College of Phy-

sicians and Surgeons at Columbia University in 1953.

Dr. Edward L. Deilly, formerly an associate in psychiatry, has been named assistant professor of psychiatry. He had previously served his residency at Duke. He earned his M.D. degree from Seton Hall College of Medicine.

Dr. Earl F. Baril, who recently completed post-doctoral work at the University of Wisconsin, has been appointed assistant professor of clinical pharmacology.

Dr. Baril, who received a B.A. degree from St. Anselm's College in New Hampshire in 1959, earned his master's from the University of Houston and his Ph.D. from the University of Connecticut.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY

Dr. Fred K. Garvey, professor of urology, who, at age 69, is retiring after almost 40 years of medical practice and teaching, was honored June 6 by the physicians who received their residency training under him at the Bowman Gray School of Medicine.

Twenty-two of the 26 former residents in urology returned to the medical school for "Dr. Fred K. Garvey Day," which consisted of clinical conferences, research sessions, and a commemorative banquet.

Garvey was presented a target rifle and a plaque bearing the names of all of the former residents. The presentation was made by Dr. Carroll W. Bowie of Anderson, S. C., who was elected president of the newly-formed Urology Residents' Alumni Association of North Carolina Baptist Hospital and the Bowman Gray School of Medicine.

An avid sportsman, Garvey intends to do a lot of hunting and fishing during retirement.

A native of Ashe County, he began the practice of urology in Knoxville, Tenn., in 1930. He relocated in Winston-Salem in 1933 and was appointed to the Bowman Gray faculty in 1940 when the school was moved from Wake County and expanded to a four-year medical school.

As director of the Section on Urology, he developed the residency training program in urology which accepted the first trainee in 1943. He served as director of the urology section for 20 years before giving up his administrative duties in 1960 to devote more time to teaching, patient care, and research.

* * *

Six students from North Carolina captured all of the top honors June 6 in the annual student awards ceremony at the Bowman Gray School of Medicine.

R. McPhail Herring of Clinton was presented the Faculty Award, the highest honor a student can receive from the faculty, and Julian R. Taylor of Raleigh received the Annie J. Covington Memorial

Award in cardiology and the Upjohn Achievement Award.

The other North Carolinians winning awards were seniors John A. Phillips of Cameron, Pediatric Merit Award; James A. McAlister Jr. of Boiling Springs, Obstetrics-Gynecology Merit Award; Robert F. Blackard of Mayodan, first place in Best Student Paper competition; and rising junior W. David Purnell of Charlotte, Roche Award.

Remaining honors went to Charles E. King Jr. of Seabrook, N. J., second place in Best Student Paper competition, and to Karl S. Roth of New York City and Dominick Addario of Bayonne, N. J., who tied for third place in the Best Student Paper competition.

* * *

The students honored three members of the faculty for excellence in teaching. The "Golden Apple" awards went to Dr. L. Earl Watts, assistant professor of medicine; Dr. Lamar Adams, resident in medicine; and Dr. Joseph L. Borowitz, assistant professor of pharmacology.

Dr. Timothy C. Pennell, instructor in surgery, to whom the student yearbook was dedicated, challenged the members of the graduating class to "always treat all people as individuals—with love, respect, understanding, and concern."

* * *

Dr. George S. Malindzak, Jr., associate professor of physiology, has been awarded a faculty fellow-

ship to support 10 weeks of study this summer in the Stanford-Ames Aeronautics and Space Research Program at Stanford University, Stanford, Calif.

His fellowship is sponsored by the National Aeronautics and Space Administration (NASA) and the American Society for Engineering Education. His work is aimed toward finding ways of applying the knowledge gained from advancements in space technology to practical uses in the diagnosis of disease and treatment of patients.

* * *

Dr. Quentin N. Myrvik, professor of microbiology, has been named editor of the Section on Immunology in the new journal, "Infection and Immunity." The journal, which will begin publication in January, 1970, is sponsored by the American Society for Microbiology.

* * *

Dr. Richard C. Proctor, professor and chairman of the Department of Psychiatry, has been installed as president of the North Carolina District Branch of the American Psychiatric Association and the North Carolina Neuro-Psychiatric Association.

* * *

Dr. Clark E. Vincent, professor of sociology, has been named to the editorial board of the "Journal of Special Education."

* * *

Dr. James F. Martin, professor of radiology, recently was elected secretary of the Eastern Radiological Society. He also is secretary of the North Carolina Chapter, American College of Radiology.

* * *

Four members of the Department of Radiology recently were appointed to key committees or commissions in the American College of Radiology. Appointed were Dr. I. Meschan, professor and chairman of the department; Dr. Damon D. Blake, associate professor; Dr. James F. Martin, professor; and Dr. C. Douglas Maynard, assistant professor. Dr. Meschan was named chairman of the Committee on Radiobiology and the Committee on Regionalization.

* * *

Dr. A. Robert Cordell, associate professor of surgery, has been named to two positions in the Southern Thoracic Surgical Association. He will serve as chairman of the membership committee and a member of the Council.

* * *

John A. Fagg, a second-year medical student from Winston-Salem, has been awarded a scholarship to support six weeks of study in England this summer.

Fagg is one of 18 medical students from the United States who were chosen for the King's Fund Scholarship Program. He is the first student from the Bowman Gray School of Medicine to participate in the program.

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Hoyle E. Setzer Jr. of Mooresville, who received the M.D. degree in June, won the first prize in student paper competition at the recent meeting of the Medical Society of the State of North Carolina. The award is given annually for the most outstanding scientific paper on original work presented by student representatives of the three medical schools in North Carolina. Setzer's paper was on "A Study of Genetic Drift in a North Carolina Isolate."

* * *

Dr. Thomas B. Clarkson, Jr., professor and director of the Department of Laboratory Animal Medicine, was a visiting lecturer May 14 on the program on comparative pathology at the University of Missouri. He spoke on "Some Mechanisms in Primate Atherosclerosis."

* * *

Dr. C. Douglas Maynard, assistant professor of radiology, was a visiting professor at the Northwestern University School of Medicine May 1. His lecture was "Uses of Radionuclides in the Diagnosis of Diseases of the Central Nervous System."

* * *

Dr. Robert E. Robinson, research instructor in medicine, spoke on the "National Language Medical Information System" at the sixth annual National Information Retrieval Colloquium May 7-8 in Philadelphia, Pa.

NEWS NOTES FROM THE
UNIVERSITY OF NORTH CAROLINA
SCHOOL OF MEDICINE

Donald T. Lauria, instructor of sanitary engineering in the University of North Carolina School of Public Health, was selected best lecturer by students in sanitary engineering.

Lauria was recognized at the Department of En-

Environmental Sciences and Engineering student-faculty banquet, held in May.

A doctoral candidate, Lauria is also an engineering associate. Upon completion of the Ph.D. degree, he will become the field co-ordinator for the department's program at the Regional School of Sanitary Engineering, San Carlos, Guatemala under a program sponsored by the Agency for International Development, U. S. State Department.

* * *

The University of North Carolina School of Medicine's program of continuing education has received full accreditation by the Council on Medical Education of the American Medical Association.

The accreditation program, which is about three years old, was developed to assure physicians of the quality of the programs being offered by medical schools, hospitals, professional societies, and other agencies.

The University inaugurated circuit courses for the physicians of the state in 1916, and was the first institution in the United States to undertake to meet the needs of physicians for refresher education on a statewide basis.

* * *

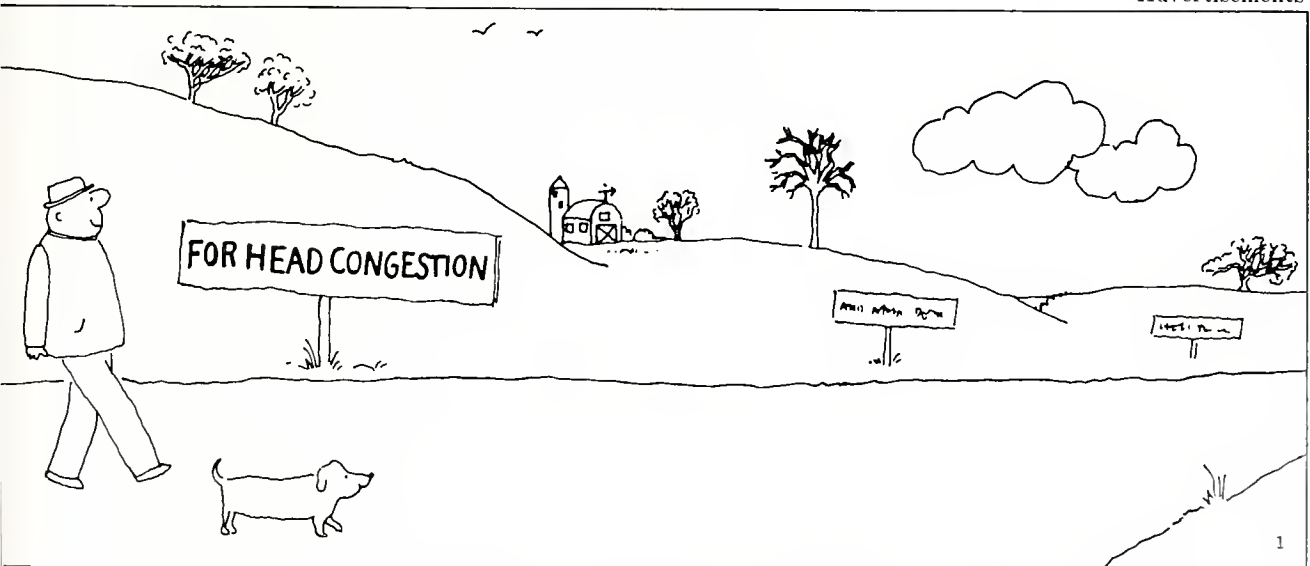
The School of Public Health at the University of North Carolina was host to the second annual meeting of the Society For Epidemiologic Research in May.

Major scientific papers presented were on the epidemiologic aspects of viral diseases, cancer, accidents, blood pressure levels, and complications of pregnancy.

* * *

Thirty-five faculty promotions in health sciences at the University of North Carolina were announced in May by Chancellor J. Carlyle Sitterson following approval of Consolidated University President William C. Friday and the Board of Trustees.

Advertisements



Promoted to the rank of professor were Thomas E. Curtis, William G. Hollister, George Johnson, William R. Straughn, Margaret C. Swanton, Luther M. Talbert, and Charles F. Zukoski, medicine.

Also Robert C. Elston, Hilton T. Goulson, James E. Grizzle, Morris Shiffman, J. Richard Udry (auxiliary—associate professor of sociology) and Henry B. Wells, public health.

Promoted to associate professors were John I. Boswell, James A. Bryan II, Harold P. Coston (also acting director of N. C. Memorial Hospital), Frederic G. Dalldorf, Robert B. Duke (also assistant professor of psychology), James E. Etheridge Jr., Frank S. French, Hillel J. Gitelman, William P. Glezen, Edward L. Hogan, Martin R. Krigman, Reginald G. Mason, Sylvanus W. Nye, Mabel M. Parker, Joseph F. Patterson, Jr., Clifford B. Reifler (also in Student Health Service), Hugh M. Shingleton, Mary C. Singleton, and Roger F. Spencer, medicine; and Sagar C. Jain, public health.

Two promotions to assistant professor were Cary W. Cooper and William L. Dewey, medicine.

* * *

Several University of North Carolina faculty members were among the participants at the annual meeting of the North Carolina Speech and Hearing Association in Charlotte (May 9-10).

A UNC professor, Dr. Doris P. Bradley of the Department of Perodontics, is president-elect of the association. A well known authority on cleft palate speech, Dr. Bradley discussed "Communications Problems on Mental Retardation" before the 250 speech, hearing and languages specialists at the meeting.

Other UNC faculty members speaking were: Dr. Paul Brandes of the English Department; Dr. Grady of the Department of Surgery; and Dr. James K. Lubker, Mrs. Bobbie B. Lubker, and Miss Mar-

garet I. Rainery of the Department of Perodontics.

Occupational and physical therapy specialists from 23 states, Canada, and Sweden gathered here in May for a five-day course in hand rehabilitation at the University of North Carolina.

The course is in its third consecutive year at UNC's unique Hand Rehabilitation Center and is the first of its kind in the United States.

UNC Medical and therapy staff and guest lecturers made up the faculty. The staff discussed and demonstrated current techniques used for traumatically injured hands.

Guest lecturers included Elizabeth Hall, Highland View Hospital; Mary Taylor, Detroit Rehabilitation Center; and Joy Cordery, research associate at Columbia University, College of Physicians and Surgeons.

* * *

Scientists at the University of North Carolina have developed a promising computerized monitoring system especially designed to improve care of heart patients in small community hospitals.

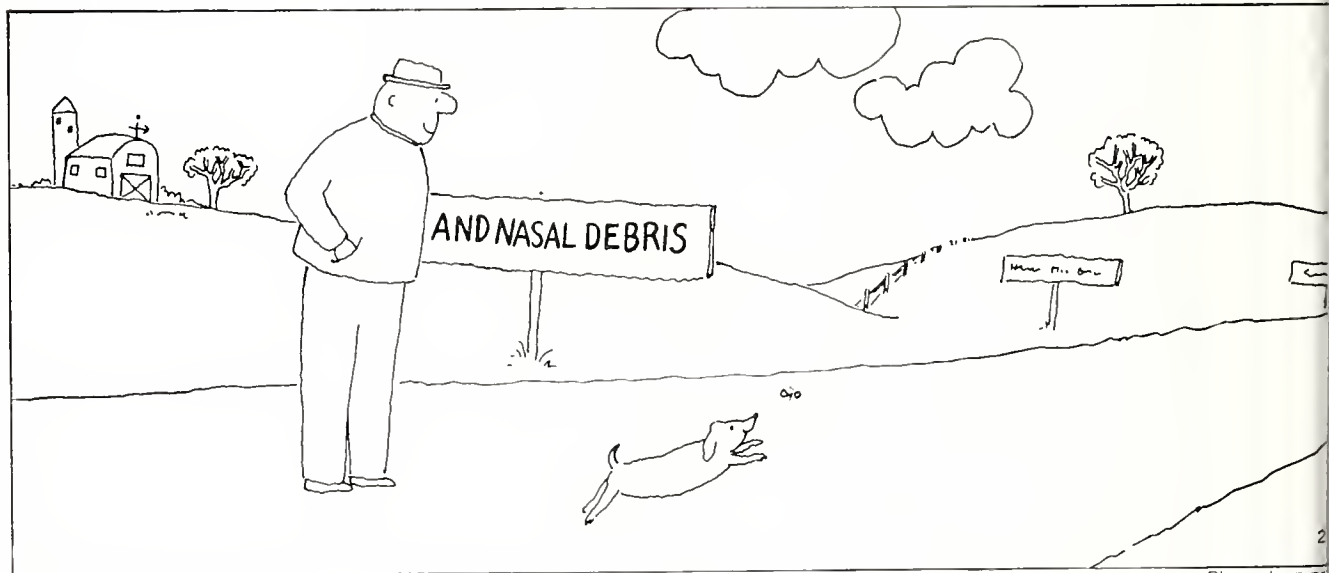
Their unique system consists of two small computers tied together by human "elements"—round-the-clock monitoring technicians. It provides early warning, for example, of fibrillation, a convulsive, unsynchronized heart movement that can be fatal to a patient if not quickly reversed.

Thus alerted, medical teams may begin chest massage, electric shock treatment, or other therapeutic measures used to restore regular heart rhythm.

Developed at the University of North Carolina under the direction of Dr. Ralph W. Stacy, professor of bioengineering and biomathematics, and Dr. Richard M. Peters, Department of Surgery, the unit is now undergoing trial operation in the intensive care ward of North Carolina Memorial Hospital, Chapel Hill.

The UNC scientists were assisted by a grant from

Advertiser



Please turn page

the National Institute of General Medical Science, one of 10 National Institutes of Health.

According to Dr. Stacy, the unit was purposely built to facilitate the care of thousands of coronary patients in many of the nation's small hospitals where large computers and other sophisticated equipment for intensive care are too expensive or otherwise impractical.

* * *

The critical shortage of doctors, the decline of the family physician, and the depersonalization of doctor-patient relationships are matters of growing concern to the American public these days.

These problems were among a number of health care topics explored here recently during the annual meeting of the Medical Alumni Association of the UNC School of Medicine.

Dr. William N. Hubbard, Jr., dean of the University of Michigan Medical School, addressed himself to these issues, as well as training programs for future doctors, the need for a merger of science and humanism, and new types of personal health problems.

Dean Hubbard has some serious doubts as to whether traditional, science-oriented training programs of medical schools can adequately prepare future physicians to deal with new types of health problems that are arising.

"The ethics and philosophy of health, as one of the human values, is going to have to be systematically re-examined," he said. "We now have to concern ourselves with the problem of the patient who did not arrive at our hands and why this was so. We have to ask whether all the manpower that is gathered together for a heart transplant really represents the optimum expenditure of medical resources in the general public interest. We have gotten to the point where we must re-examine carefully some of our most comfortable assumptions

about the nature of the physician's professional responsibility."

The dean cited adult obesity; juvenile malnutrition; the health impact of cigarettes, alcohol and drugs; psychological and emotional disturbances; automobile accidents; suicides; infant deaths; care for the elderly; and control of hospital costs as examples of the types of "pressing problems of personal health" which future physicians must face.

NORTH CAROLINA STATE BOARD OF HEALTH

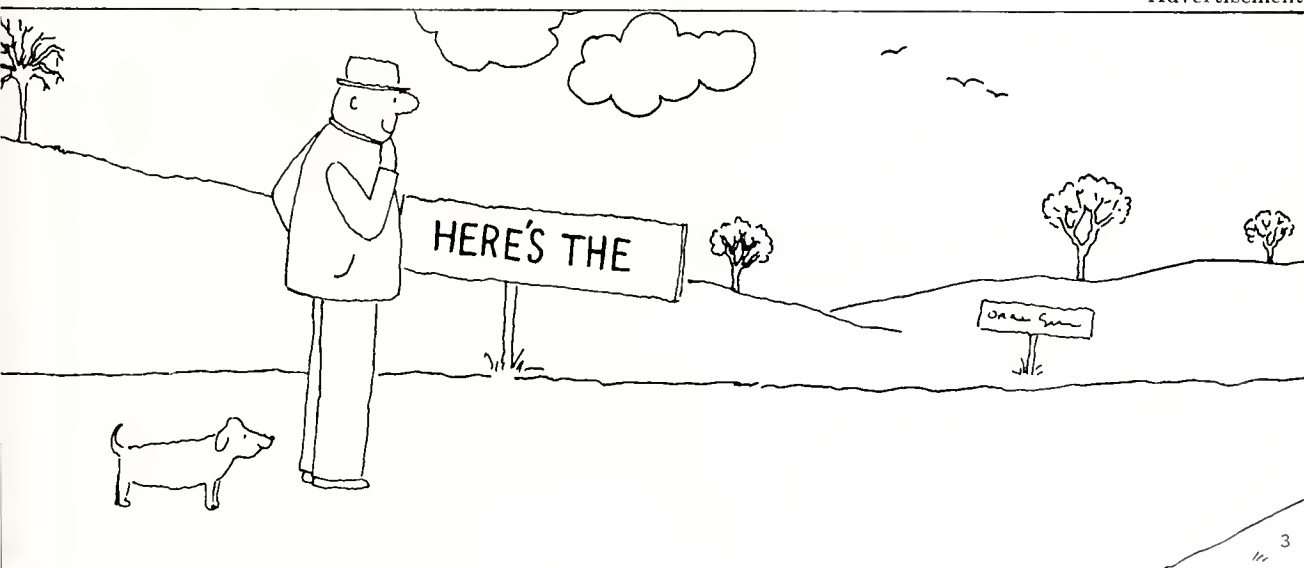
One hundred and twenty laboratory technicians have received training in a laboratory test which is used to aid private and public health physicians in the diagnosis and control of German measles (rubella).

The North Carolina State Board of Health is providing this opportunity for training. Technicians from 35 different hospitals located throughout North Carolina have attended one of the five workshops held in its Laboratory Division June 16-20.

This activity is of great current interest. The classical form of rubella, a mild viral disease often producing a rash, is usually not complicated by more serious manifestations. German measles is now known to be a dangerous disease when it is contracted during pregnancy, however, especially during the first trimester. If the mother becomes infected, the child most likely will become infected; and this congenital infection most probably will produce prenatal birth defects.

Twenty thousand children are reported to have been deformed as the result of a tremendous epidemic of rubella occurring during 1964 throughout the United States. The demand for a practical and reliable laboratory test has been met. The test of choice is the hemagglutination inhibition test for rubella.

Advertisements



This test is now available to physicians. The Virus Section of the Laboratory of the North Carolina State Board of Health offers the service.

The five workshops were conducted by the Virus Section of the North Carolina State Board of Health in cooperation with the National Communicable Disease Center at Atlanta, Georgia, and the Continuing Education and Field Service of the School of Public Health, University of North Carolina. The purpose was to provide for the laboratory personnel who will be needed to handle the anticipated increase in the volume of tests to be performed.

NORTH CAROLINA BLUE CROSS AND BLUE SHIELD, INC.

The appointment of Harold M. Petersen as director of Reimbursement Administration for North Carolina Blue Cross and Blue Shield, Inc., is announced by the Corporation's president, John Alexander McMahon. Petersen has responsibility for reimbursement administration of Medicare, other government programs, and regular Blue Cross and Blue Shield. This includes contracts for payments to hospitals, extended care facilities and other providers.

The new Division of Reimbursement Administration which Petersen heads has offices on the tenth floor of the N. C. Mutual Insurance Building in Durham.

WILLIAM S. HALL PSYCHIATRIC INSTITUTE

Programs

The William S. Hall Psychiatric Institute of Columbia, South Carolina has announced its continuing education programs for 1969-1970. A brief outline of the program follows.

Human Sexuality: 12 hours. October 29, 30, 1969. Symposium for practicing physicians, including psychosexual growth, development, and aberrations

—modes of expression and management.

Behavior Problems in Children: 12 hours. January 28, 29, 1970. Symposium for practicing physicians on the more common difficulties encountered. Includes a review of normal and abnormal neurological and psychiatric development.

Psychosomatic Medicine Symposium: 12 hours. April 1, 2, 1970. Genesis, basic principles, and the various kinds of somatic disorders resulting from maladaptive living.

In-Service Training

The Psychiatric Examination: 8 hours a day for 33 days. A review of the basic psychiatric examination for practicing physicians. Includes supervised reading, comprehensive medical and psychiatric history, mental status examination, and neurological evaluation, providing adequate basis for definitive diagnosis. Times scheduled by arrangement.

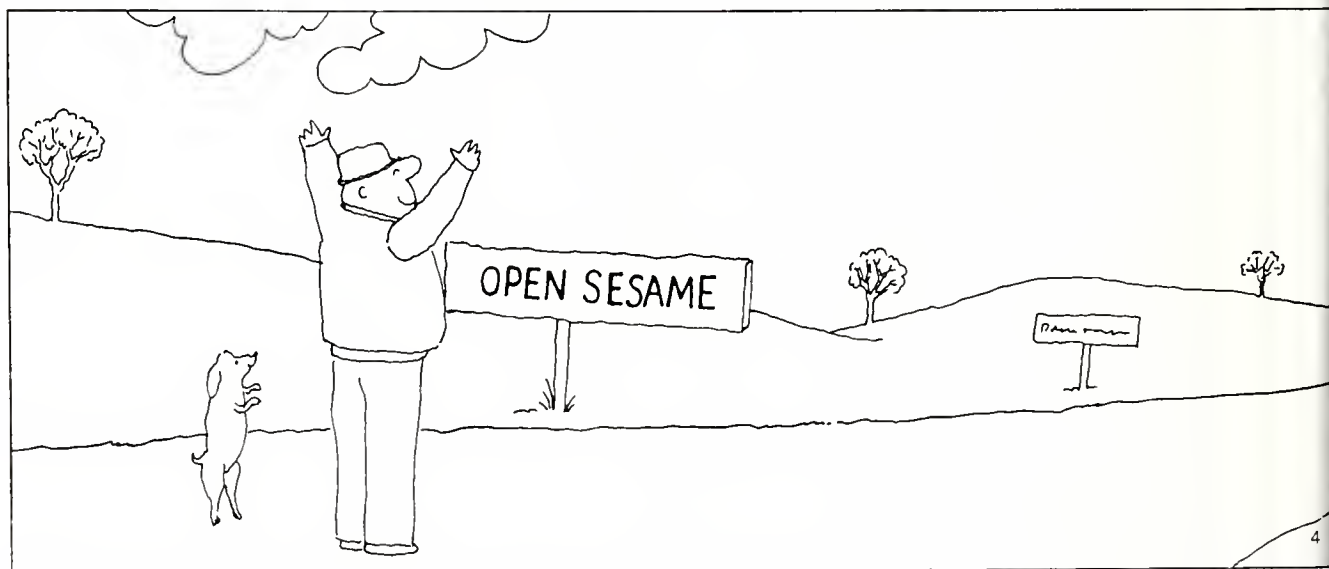
Basic Psychiatry: 8 hours a day for 3 days. A review that includes concepts of behavior, personality development, adaptive mechanisms, and psychopathological manifestations. Prescribed studying, clinical conferences, and seminars. Times scheduled by arrangement.

Basic Psychiatry: 8 hours a day for 3 days. A review of the basic psychiatric disorders as may be expressed in behavioral, psychological, and physical symptoms with emphasis on criteria for differential diagnosis. Guided reading, audio-visual aids, clinical conferences, and seminars. Enrollees perform procedures under supervision. Times scheduled by arrangement.

NOTICE

Dr. Howard Schneider, Chairman of an ad hoc committee, announces the purpose of establishing a national society of Police and Fire Surgeons and suggests the cooperation of state and county medical societies. (75 Lee Avenue, Yonkers, New York, 10705)

Advertisements



Please turn page 4

THE COMMONWEALTH FUND

Two foundations have jointly announced grants which will enable five of North America's leading medical schools to launch a collaborative program, including the education of a new type of clinical physician, aimed at improving systems and institutions for providing medical care and health services.

The collaborative program is being developed under the supervision of the Departments of Medicine of the five schools—at Duke, Case Western Reserve, Johns Hopkins, McGill, and Stanford Universities—and is underwritten by a \$250,000 grant from the Carnegie Corporation and \$298,100 from the Commonwealth Fund.

Central to the program are fundamental changes to improve two phases of medical education in need of attention: the three or more years of specialty training immediately following graduation from medical school, and the lifetime of continuing education by which practicing physicians keep abreast of medical advances.

Each of the participating Departments of Medicine will expand its programs of graduate medical education—internship and residency training—to draw upon diverse non-medical disciplines within their universities to produce a new type of physician. Termed "clinical scholars," these doctors will have been educated for leadership roles in community hospitals, neighborhood health centers, and other institutions for the delivery of health care.

The representatives from the five schools will work as a panel to supervise the progress of the program as a whole. The Carnegie and Commonwealth grants, over a two-year period, will enable them to name a faculty member to serve in each school as full-time director of the program, as well as to employ an overall coordinator to serve as a

senior advisor and consultant. The remainder of the funds are for residents' salaries, trainee stipends, and other program start-up expenses.

AMERICAN HOSPITAL ASSOCIATION

The American Hospital Association has been awarded a grant of \$87,235 by the National Institute of Mental Health to finance the first year of a two-year educational project aimed at improving the hospital care of alcoholic patients.

Edwin L. Crosby, M.D., executive vice president and director of AHA, said a series of three invitational conferences will be scheduled in different areas of the country in the first year of the project.

Dr. Crosby pointed out that hospitals can expect to become more involved in the problems of alcoholism, in light of the general agreement of the medical profession that alcoholism is an illness. In addition, an increasing number of states are enacting statutes requiring that alcoholics be treated as persons with an illness, and not punished as law violators.

Mead Johnson Introduces New Calcium Product

U. S. Department of Agriculture studies indicate that calcium with its high daily requirement is one of the nutrients most often deficient in American diets.

Mead Johnson Laboratories has announced a new product, SPAR-CAL, which makes calcium—and the vitamin D necessary for its absorption and utilization—available in a pleasant-tasting form.

The orange-flavored, effervescent tablet dissolves quickly in six ounces of water and provides 500 mg. of elemental calcium (66% of MDR) and 200 USP units of vitamin D.

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The Month in Washington

The American Medical Association has offered to cooperate in a Senate investigation of large Medicare and Medicaid payments to physicians and other health practitioners.

The offer followed a Senate speech by Sen. John J. Williams, (R., Del.), in which he reported that the staff of the Senate Finance Committee had found that several thousand doctors, dentists, and others had received \$25,000 or more for their services under the two government programs in 1968.

In a second Senate speech, Williams expressed appreciation for the AMA offer to cooperate.

"I can assure each of these groups that our study will not result in a blanket indictment against any segment of the industry involved. We fully recognize that the overwhelming percentage of those who are in any way connected or working with this program are trying to do a good job; however, when instances of exploitation or excessive charges are discovered they must be exposed and properly dealt with."

Williams, who has announced he will not seek reelection next year, is a member of the Senate Finance Committee which is making an extensive study of the operation of Medicaid and Medicare.

Williams said that, although a staff re-

port would not be ready until later this summer, the committee's investigation already had shown:—

First, in 1968 the Medicare program paid \$25,000 or more to each of at least 5,000 physicians.

Second, thousands of health practitioners—doctors, dentists, optometrists, and others—were each paid \$25,000 or more under the welfare health care programs in 1968. . . . A surprising note is the large number of dentists appearing on the lists from welfare agencies. . . .

Data have also been gathered and detailed tables prepared comparing the average medicare payments for the most common surgical procedures for older people with the maximum payments allowed under the most widely held Blue Shield contract in the same geographical area.

The results are startling. Medicare's average payments run as much as two to four times as high as Blue Shield maximums. For example, in two areas of the country medicare's average payment for a cataract operation is more than four times as much as the Blue Shield allowance. These are not isolated cases. There is a pronounced pattern of inflated payments by medicare.

Another unusual situation has occurred in Social Security's pressing carriers to pay for so-called supervisory services rendered by a teaching physician even though the actual care is provided by an intern or resident. Before medicare virtually no insurer paid for such services. . . .

The investigation has expanded the evaluation of carrier and intermediary performance to determine whether the Government is getting what it is certainly paying for and the extent to which intermediaries and carriers are carrying out specific functions assigned to them by the medicare statute.

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NORTH CAROLINA DAIRY COUNCILS

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Following Williams' first speech, the AMA issued a statement saying that it shared with the Senator a concern over the rising costs of Medicare and Medicaid. The Association offered to cooperate with the Senate Finance Committee or any other congressional committee studying the problem of rising health care costs.

The AMA statement said:—

For some time the AMA has been giving national leadership in coordinating the efforts of state and county medical societies in the establishment and effective functioning of local review and utilization committees checking on the health care services rendered under the Medicare and Medicaid programs. Close liaison also has been established between carriers and many medical societies in reviewing disbursements under the government programs.

All investigations so far have indicated that an overwhelming majority of physicians participating in medicare and medicaid are charging reasonable fees. The charges of only about 2% of the physicians receiving payments from the programs have been challenged. Of course, the AMA favors appropriate action in any of the cases where physicians are found to receive improper payments. Last June, the AMA Board of Trustees urged all state and local medical societies 'to act swiftly and firmly in all instances of known exploitation, and excessive charges for health care that may occur in their jurisdiction.' In 1967, the AMA said 'any reports of abuses by physicians or by any other health care program should be thoroughly and promptly investigated and action taken where indicated.' Several medical societies have expelled members where it has been proved that a physician's charges were excessive or he in some other way exploited the program.

The AMA, through its publications and speeches by its officials, has been emphasizing to physicians the responsibility they have to hold down the health care costs of their patients both under and outside government programs. In an April 17 letter to Finch, Dr. Wilbur said the AMA 'is eager to make available to your office the composite experience and judgment of the nation's physicians, who are the principal providers of health care to all the people.'

COMMITTEES AND COMMISSION APPOINTMENTS

(Continued from page 287)

59. **Advisors to: North Carolina Association of Medical Assistants (2)**
Philip Naumoff, M.D.⁶⁰
1012 Kings Drive, Charlotte 28207

Emmett S. Lupton, M.D.⁴¹
1100 Olive St., Greensboro 27401

60. **Representative on: Governor's Coordinating Council on Aging (1)**

Thomas R. Nichols, M.D.¹² (1973)
306-O W. Union St., Morganton 28655

61. **North Carolina Committee on Patient Care (1)**

William B. McCutcheon, Jr., M.D.³²
1007 Broad St., Durham 27705

62. **Medical Society Consultant on Podiatry**

Thomas B. Dameron, Jr., M.D.⁹²
600 Wade Ave., Raleigh 27605

63. **Committee on Medicare (3) VII-6**

David G. Welton, M.D.⁶⁰ **Chairman**
1012 Kings Drive, Charlotte 28207
Albert Joseph Diab, M.D.⁹²
1919 Clark Ave., Raleigh 27605
H. Frank Starr, Jr., M.D.⁴¹
P. O. Box 20727, Pilot Life, Greensboro 27407

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Physicians—2 vacancies on staff. Salary range staff physician \$14,472-\$23,472; staff psychiatrist \$18,420-\$27,180. 40 hour week, 3 weeks vacation, sick leave, and retirement. Contact R. L. Rollins, Jr., M.D., Dorothea Dix Hospital, Raleigh, North Carolina 27602.

OFFICE SPACE—NORTH HILLS PROFESSIONAL PARK, RALEIGH, N. C.—To be ready for occupancy in late October. Individually designed suites to meet your requirements. Heating and air conditioning controls for each suite. Complete services furnished. Interested physicians may write or call T. W. Smith, P. O. Box 17361, Raleigh, N. C. 27609. Telephone (9-9) 787-5559 for complete details.

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It is the time when motivation is highest—when a new mother needs expert advice for the future, so she can space her children and limit her family.

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Non-nursing mothers may begin Ovulen-21 immediately after delivery, on the day of departure from the hospital or at the first postpartum visit, as desired. It is recommended that nursing mothers begin Ovulen-21 four weeks after delivery.

A small fraction of the hormonal agents in oral contraceptive pills has been identified in the milk of mothers receiving these drugs. The long-range effect on the nursing infant cannot be determined at this time.

Indication—Oral contraception.

Contraindications—Thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia, undiagnosed abnormal genital bleeding.

Warnings—Watch for the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism, retinal thrombosis); if present or suspected discontinue the drug immediately.

British studies reported in April 1968^{1,2} estimate there is a seven- to tenfold increase in mortality and morbidity due to thromboembolic diseases in women taking oral contraceptives. In these controlled retrospective studies, involving 36 reported deaths and 58 hospitalizations due to "idiopathic" thromboembolism, statistical evaluation indicated that the differences observed between users and non-users were highly significant. The conclusions reached in the studies are summarized in the table below:

Comparison of Mortality and Hospitalization Rates Due to Thromboembolic Disease in Users and Non-Users of Oral Contraceptives in Britain.

Category	Mortality Rates		Hospitalization Rates (Morbidity)
	Age 20-34	Age 35-44	Age 20-44
Users of Oral Contraceptives	1.5/100,000	3.9/100,000	47/100,000
Non-Users	0.2/100,000	0.5/100,000	5/100,000

No comparable studies are yet available in the United States. The British data, especially as they indicate the magnitude of the increased risk to the individual patient, cannot be applied directly to women in other countries in which the incidences of spontaneously occurring thromboembolic disease may differ.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or sudden onset of proptosis, diplopia or migraine. Withdraw medication if papilledema or retinal vascular lesions are found.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that pregnancy be ruled out for any patient who has missed two consecutive periods before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the first missed period.

A small fraction of the hormone agents in oral contra-

ceptives has been identified in the milk of mothers receiving these drugs. The long-range effect on the nursing infant cannot be determined at this time.

Precautions—Pretreatment physical examination should include special reference to the breasts and pelvic organs, and a Paponicoloou smear.

Endocrine and possibly liver function tests may be affected by Ovulen. Therefore, it is recommended that such tests if abnormal be repeated after the drug has been withdrawn for two months.

Pre-existing uterine fibromyomas may increase in size under the influence of progestogen-estrogen preparations.

Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation.

In breakthrough bleeding, and all irregular vaginal bleeding, consider nonfunctional causes. Adequate diagnostic measures are indicated in undiagnosed vaginal bleeding.

Carefully observe patients with a history of psychic depression and discontinue the drug if severe depression recurs.

Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study.

A decrease in glucose tolerance has occurred in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be observed carefully while receiving Ovulen.

Because of the effects of estrogens on epiphyseal closure Ovulen should be used judiciously in young patients in whom bone growth is not complete.

The age of the patient constitutes no absolute limiting factor, although Ovulen therapy may mask the onset of the climacteric.

The pathologist should be informed of Ovulen therapy when relevant specimens are submitted.

Adverse Reactions—A statistically significant association has been shown between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: cerebrovascular accidents, neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement, secretion), change in weight, changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, allergic rash, rise in blood pressure in susceptible individuals, mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: ovulation post treatment, premenstrual-like syndrome, changes in libido, changes

in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme and nodosum, hemorrhagic eruption, itching. The following laboratory results may be altered by oral contraceptives: hepatic function: increased sulfobromophthalein and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T₃ uptake values; metyrapone test; pregnanediol determination.

References: 1. Inman, W. H. W., and Vessey, M. P.: Brit. Med. J. 2:193-199 (April 27) 1968. 2. Vessey, M. P., and Doll, R.: Brit. Med. J. 2:199-205 (April 27) 1968.

Before prescribing see complete prescribing information.



Where "The Pill" Begon
G. D. SEARLE & CO., P.O. Box 5110, Chicago, Ill. 60680

SEARLE

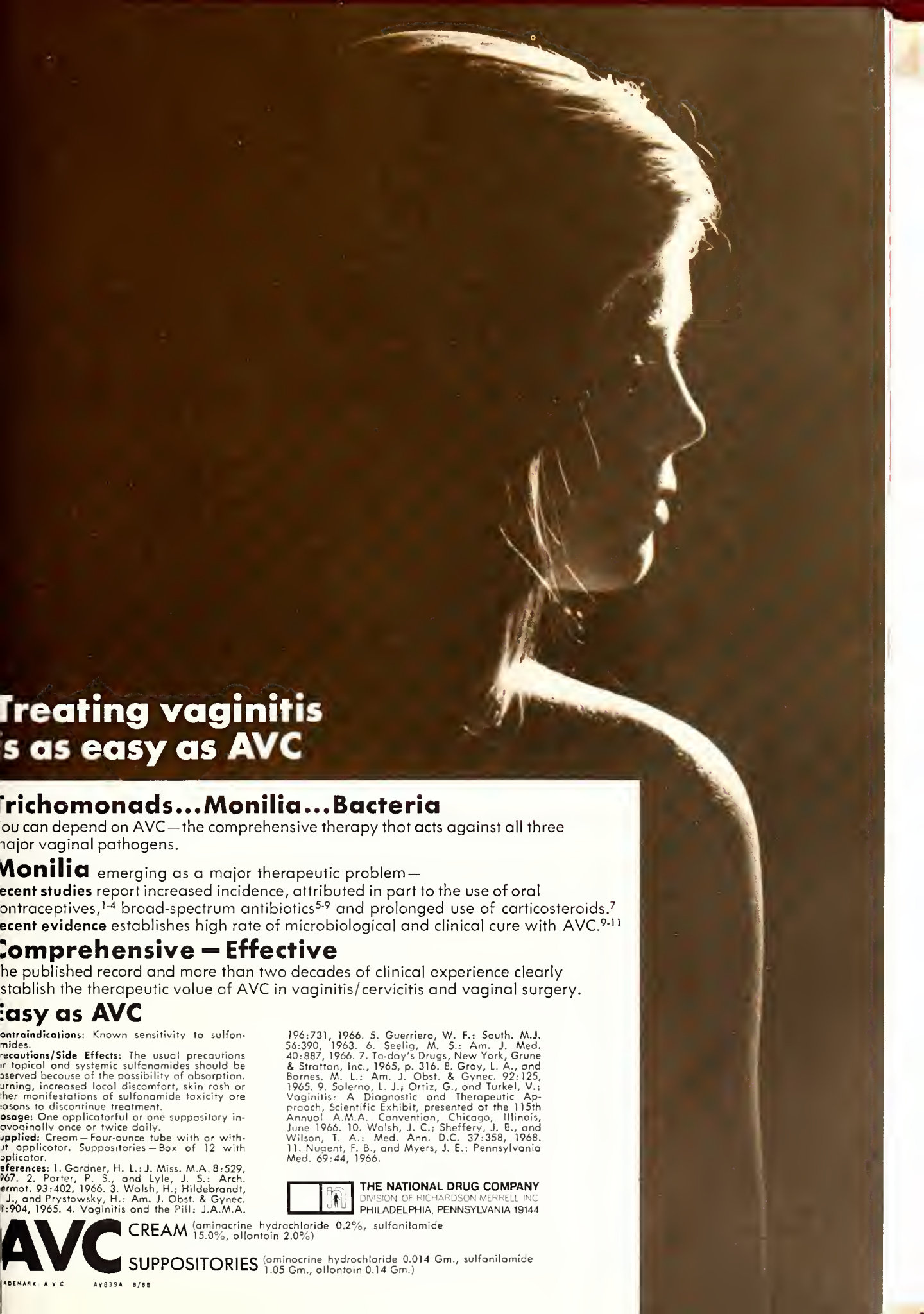


Benadryl[®]

(diphenhydramine hydrochloride)

PARKE-DAVIS

Parke, Davis & Company, Detroit, Michigan 48232
56569



Treating vaginitis as easy as AVC

Trichomonads...Monilia...Bacteria

You can depend on AVC—the comprehensive therapy that acts against all three major vaginal pathogens.

Monilia emerging as a major therapeutic problem—
Recent studies report increased incidence, attributed in part to the use of oral
contraceptives,¹⁻⁴ broad-spectrum antibiotics⁵⁻⁹ and prolonged use of corticosteroids.⁷
Recent evidence establishes high rate of microbiological and clinical cure with AVC.⁹⁻¹¹

Comprehensive — Effective

The published record and more than two decades of clinical experience clearly
establish the therapeutic value of AVC in vaginitis/cervicitis and vaginal surgery.

Easy as AVC

Contraindications: Known sensitivity to sulfonamides.

Precautions/Side Effects: The usual precautions for topical and systemic sulfonamides should be observed because of the possibility of absorption. Burning, increased local discomfort, skin rash or other manifestations of sulfonamide toxicity are reasons to discontinue treatment.

Dosage: One applicatorful or one suppository intravaginally once or twice daily.

Applied: Cream—Four-ounce tube with or without applicator. Suppositories—Box of 12 with applicator.

References: 1. Gardner, H. L.: J. Miss. M.A. 8:529, 1967. 2. Porter, P. S., and Lyle, J. S.: Arch. Gynecol. 93:402, 1966. 3. Walsh, H.; Hildebrandt, J., and Prystowsky, H.: Am. J. Obst. & Gynec. 9:904, 1965. 4. Vaginitis and the Pill: J.A.M.A. 196:731, 1966. 5. Guerriero, W. F.: South. M.J. 56:390, 1963. 6. Seelig, M. S.: Am. J. Med. 40:887, 1966. 7. Today's Drugs, New York, Grune & Stratton, Inc., 1965, p. 316. 8. Groy, L. A., and Barnes, M. L.: Am. J. Obst. & Gynec. 92:125, 1965. 9. Solerno, L. J.; Ortiz, G., and Turkel, V.: Vaginitis: A Diagnostic and Therapeutic Approach, Scientific Exhibit, presented at the 115th Annual A.M.A. Convention, Chicago, Illinois, June 1966. 10. Walsh, J. C.; Sheffery, J. B., and Wilson, T. A.: Med. Ann. D.C. 37:358, 1968. 11. Nugent, F. B., and Myers, J. E.: Pennsylvania Med. 69:44, 1966.



THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON MERRELL INC
PHILADELPHIA, PENNSYLVANIA 19144

AVC CREAM (aminacrine hydrochloride 0.2%, sulfanilamide 15.0%, ointment 2.0%)
AVC SUPPOSITORIES (aminacrine hydrochloride 0.014 Gm., sulfanilamide 1.05 Gm., ointment 0.14 Gm.)

in trauma

new

Orenzyme[®] Bitabs[®]

One tablet q.i.d.

Trypsin: 100,000 N.F. Units, Chymotrypsin: 8,000 N.F. Units; equivalent in tryptic activity to 40 mg. of N.F. trypsin

DOUBLE STRENGTH

Proteolytic enzyme therapy
specifically indicated
for the rapid resolution of
inflammation and edema
as adjunctive therapy
in accidental and
surgical trauma.

1 tablet q.i.d.
provides recommended
therapeutic dose at
lower cost.



Description: ORENZYME BITABS offers the therapeutic effects of trypsin in an oral form as adjunctive therapy for the rapid resolution of inflammation and edema. ORENZYME BITABS is convenient to use, promotes patient cooperation and is ideally suited for maintenance therapy following parenteral trypsin.

Indications: When used as adjunctive therapy for the rapid resolution of inflammation and edema, good results have been obtained in:

- ☐ Accidental Trauma
- ☐ Postoperative Tissue Reactions

Other conventional measures of treatment should be used as indicated. In infection, appropriate anti-infective therapy should be given.

Contraindications: ORENZYME BITABS should not be given to patients with a known sensitivity to trypsin or chymotrypsin.

Precautions: It should be used with caution in patients with abnormality of the blood clotting mechanism such as hemophilia, or with severe hepatic or renal disease. Safe use in pregnancy has not been established.

Adverse Reactions: Adverse reactions with ORENZYME have been reported infrequently. Reports include allergic manifestations (rash, urticaria, itching), gastrointestinal upset and increased speed of dissolution of animal-origin surgical sutures. There have been isolated reports of anaphylactic shock, albuminuria and hematuria. Increased tendency to bleed has also been reported but, in controlled studies, it has been seen with equal incidence in placebo-treated groups. (See Precautions.) It is recommended that if side effects occur medication be discontinued.

Dosage: One tablet q.i.d.



THE NATIONAL DRUG COMPANY
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PHILADELPHIA, PENNSYLVANIA 19144

U.S. PATENT NO. 3,004,803 4/69 D-5214

The AMBAR®
SCRAPBOOK
of

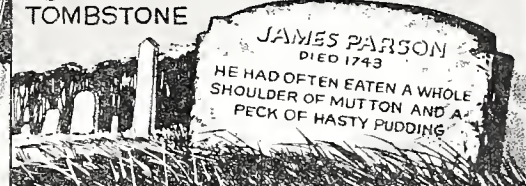
Obesity Oddities

FACT & LEGEND

OBESITY WAS A MILITARY OFFENSE!
OVERWEIGHT ROMAN HORSEMEN WERE MADE TO
FORFEIT THEIR MOUNTS AND BECOME FOOT SOLDIERS!

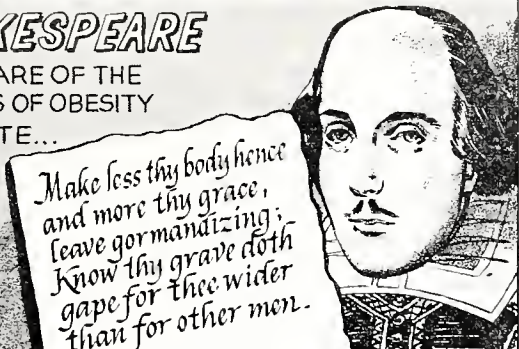


**RECORDED ON AN ENGLISHMAN'S
TOMBSTONE**



SHAKESPEARE

WAS AWARE OF THE
DANGERS OF OBESITY
HE WROTE...



*Make less thy body hence
and more thy grace;
leave gormandizing;
Know thy grave doth
gape for thee wider
than for other men.*



THE
COST OF
**AMBAR
EXTENTABS**

IS APPROXIMATELY ONE
HALF THAT OF OTHER LEAD-
ING APPETITE SUPPRESSANTS

**AN IMPORTANT FACTOR
IN LONG TERM THERAPY**



CONTROL FOOD AND MOOD ALL DAY LONG WITH A SINGLE MORNING DOSE

One Ambar Extentab before breakfast can help control most patients' appetite for up to 12 hours. Methamphetamine, the appetite suppressant, gently elevates mood and helps overcome dieting frustrations. Phenobarbital, the sedative in Ambar, controls irritability and anxiety...helps maintain a state of mental calm and equanimity. Both work together to ease the tensions that erode the willpower during periods of dieting. Also available: Ambar #1 Extentabs®—methamphetamine hydrochloride 10 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

AMBAR #2 EXTENTABS®

methamphetamine HCl 15 mg.,
phenobarbital 64.8 mg. (1 gr.)
(Warning: may be habit forming).

BRIEF SUMMARY/Indications: Ambar suppresses appetite and helps offset emotional reactions to dieting. **Contraindications:** Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. **Precautions:** Administer with caution in the presence of cardiovascular disease or hypertension. **Side Effects:** Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. See package insert for further details.

A. H. ROBINS COMPANY, RICHMOND, VA. 23220 **AH-ROBINS**

But before you prescribe Pertofrane, please see the full prescribing information and especially note Contraindications, Precautions, Warning, Adverse Reactions and Dosage. A brief summary of that information is included here.

Pertofrane® desipramine hydrochloride

Indications: For relief of depression.

Contraindications: Do not use drugs of the M.A.O.I. class with Pertofrane. Hyperpyretic crises or severe convulsive seizures may occur; potentiation of adverse effects can be serious or even fatal. When substituting this drug in patients receiving an M.A.O.I., allow an interval of at least 7 days. Initial dosage in such patients should be low and increases should be gradual and cautiously prescribed.

Warning: Activation of psychosis may occasionally be observed in schizophrenic patients. Do not use in patients under 12 years old, and do not use in women who are or may become pregnant unless the clinical situation warrants the potential risk.

Precautions: Careful supervision and protective measures for potentially suicidal patients are necessary. Discontinuation of therapy or adjunctive use of a sedative or tranquilizer may be necessary in the presence of increased anxiety or agitation, hypomania or manic excitement. However, phenothiazines may aggravate the condition. Atropine-like effects may be more pronounced (e.g. paralytic ileus) in susceptible patients and in those receiving anticholinergic drugs (including antiparkinsonism agents). Carefully observe patients with increased intraocular pressure. Prescribe cautiously in hyperthyroid patients and in those receiving thyroid medications. Cardiovascular complications (myocardial infarction and arrhythmias) are potential risks since they have occasionally occurred with imipramine, the parent compound. Desipramine may block the pharmacologic activity of guanethidine and related adrenergic neuron-blocking agents. Hypertensive episodes have been observed during surgery in patients on desipramine therapy.

Before prescribing the drug, the physician should be thoroughly familiar with prescribing information, with the literature, with all adverse reactions, with the diagnosis and management of depression, and with the relative merits of all measures for treating the condition.

Adverse Reactions: Dry mouth, constipation, disturbed visual accommodation, anorexia, perspiration, insomnia, drowsiness, dizziness, headache, nausea, epigastric distress, and skin rash (including photosensitization) may appear. Since orthostatic hypotension has occurred, carefully observe patients requiring concomitant vasodilating therapy, particularly during the initial phases. Other adverse reactions include tachycardia, changes in EEG patterns, tremor, falling, mild extrapyramidal activity, neuromuscular incoordination, epileptiform seizures. A confusional state (with such symptoms as hallucinations and disorientation) occurs occasionally and may require reduced dosage or discontinuance of therapy. Rarely, transient eosinophilia, slight elevation in transaminase levels, transient jaundice, or liver damage have occurred. If abnormalities occur in liver function tests, discontinue drug and investigate. Occasional hormonal effects, particularly decreased libido or impotence and instances of gynecomastia, galactorrhea and female breast enlargement have been observed. Urinary frequency or retention may occur. The drug should be discontinued if agranulocytosis, bone marrow depression, jaundice, thrombocytopenia, or purpura occur.

Dosage: 25 to 50 mg t.i.d. The maximum daily dose is 200 mg. Continue maintenance dosage for at least 2 months after obtaining satisfactory response. Generally, elderly and adolescent patients should be given low doses.

Availability: Pink capsules of 25 mg, in bottles of 100 and 1000. (B) 46-530-E

For complete details, please see the prescribing information.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York 10502



What makes

A man?
Another woman?
Three kids?
No kids at all?
Wrinkles?
You name it.

Is she truly depressed?

Is that why she lets go
in your office?

You comfort her.
Talk to her.
And, if she is depressed,
consider Pertofrane.
Because
in 3 to 5 days
she can often begin
to cope,
work,
maybe play,
even enjoy.

Pertofrane®

desipramine hydrochloride
In depression...
when words are not enough

woman cry?



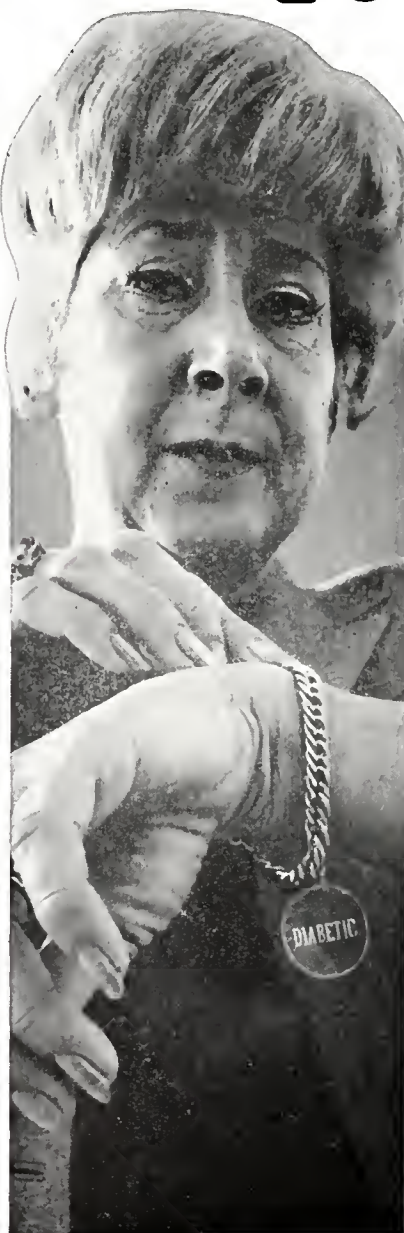
a broad-spectrum antibiotic for the diabetic: threat or therapy?

Disordered metabolism makes her prone to bacterial infection —and to moniliasis.

When she needs tetracycline, she may also need protection against the threat of fungal overgrowth. And Tetrex-F can provide both.

Each capsule contains 250 mg. of tetracycline phosphate complex to control sensitive bacterial pathogens...and nystatin, 250,000 units, as a precautionary measure against troublesome vaginitis, proctitis or other monilial infections. However, superinfection with other, non-susceptible organisms may occur.

Tetrex-F[®]
(tetracycline phosphate
complex-nystatin)



PRESCRIBING INFORMATION: Tet-F. 5 — 2/23/67. For complete information consult Official Package Circular.

Indications: Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections.

Contraindications: The drug is contraindicated in patients hypersensitive to its components.

Warnings: Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood).

Precautions: Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months.

Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur.

Usual Adult Dosage: 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.

Supplied: Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin.

For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles. **A.H.F.S. Category 8:12**

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201

Compliments of

Wachtel's, Inc.



**Surgical
Supplies**



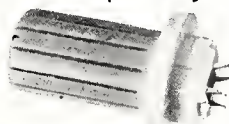
15 Victoria Road

P. O. Box 1716 Telephone AL 3-7616

ASHEVILLE, North Carolina

**TB
is still
around.**

In 1967 almost 45,000 new active cases were reported. Isn't that a good reason to make tuberculin testing with the white LEDERTINE™ Applicator a routine part of your physical examinations?



**TUBERCULIN
TINE TEST**

(Rosenthal) with Old Tuberculin

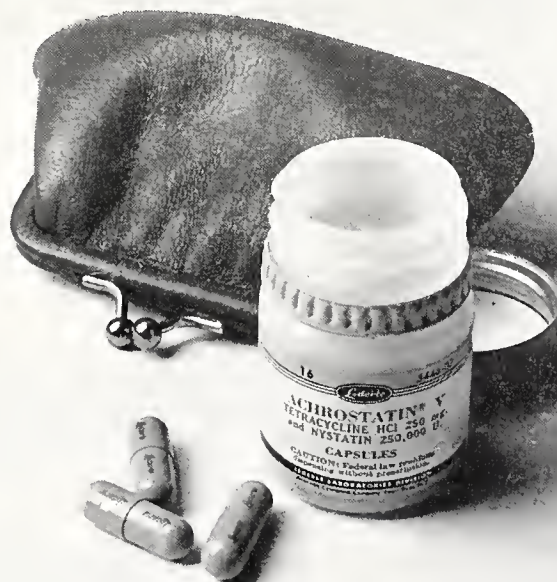
Precautions: With a positive reaction, consider further diagnostic procedures. Use with caution in persons with active tuberculosis or known allergy to acacia. Vesiculation, ulceration, or necrosis may occur at the test site in highly sensitive persons.



LEDERLE LABORATORIES

A Division of American Cyanamid Company, Pearl River, N.Y.
472-9

—The lowest priced tetracycline—nystatin combination available—



HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA
Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF
DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified
for Medicare

Complete facilities for evaluation and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

High school facilities for a limited number of appropriate patients are now available on grounds. The School Program is fully integrated into the hospital treatment program and is accredited through the Asheville School System.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available

Contact: Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions
or

Area Code 704-254-3201

Charles W. Neville, Jr., M.D.

Assistant Professor of Psychiatry and Medical Director

—The lowest priced tetracycline—nystatin combination available—



**The first Medihaler was developed
for the physician-inventor's own child.**

**The improved model you prescribe today is still
made with the same painstaking devotion.**

When your patient is in the grip of bronchospasm and reaches for his Medihaler, it must work. Not sometimes. Not most of the time. *Always.*

This is the ideal of perfection which has motivated the constant process of improvement of Riker's Medihaler.

Since its invention in 1956—when a Riker physician developed the Medihaler because of his determination to make better treatment available for his own asthmatic child—Riker has pioneered just about every significant forward step in bronchodilator aerosol therapy.

Riker developed the precision Medihaler valve, which assures the delivery of an automatically measured dose each and every time.

Riker was first to formulate medication in a non-irritating, non-alcoholic vehicle.

Riker pioneered pre-grinding of the medication to 1-5 micron size, assuring maximum distribution to the distal bronchioles for greater topical effectiveness with less systemic action. (Oddly, even today not all competitors have adopted these two advances.)

Add to these advantages a quality control system involving 168 physical measurements and chemical tests, plus not one but two test firings on every single unit leaving the plant, and you can readily see why there is no more dependable relief for bronchospasm than your prescription for Duo-Medihaler or Medihaler-Iso.

Please see next page for complete prescribing information.

Medihaler-Iso®
(isoproterenol sulfate)



Duo-Medihaler®
isoproterenol HCl (4mg./cc.)
phenylephrine bitartrate (6mg./cc.)

Riker Laboratories, Northridge, California 91324

The Riker Representatives in your area are: Charles Baker, Ron Focher, Mike Blalock

SUMMARY OF PRESCRIBING INFORMATION

DUO-MEDIHALER®

(isoproterenol hydrochloride and phenylephrine bitartrate)

Indications: Duo-Medihaler provides relief of dyspnea resulting from bronchospasm and congestion and edema of the tracheobronchial tree. It is indicated in:

1. Acute bronchial asthma and other allergic states
2. Chronic obstructive pulmonary diseases, such as chronic bronchitis and pulmonary emphysema.

Contraindications: Known hypersensitivity to either agent constitutes a contraindication to the use of this drug. Isoproterenol preparations are generally contraindicated in patients with pre-existing cardiac arrhythmias associated with tachycardia because the cardiac stimulant effect of the drug may aggravate such disorders.

Warnings: Excessive use of an adrenergic aerosol should be discouraged, as it may lose its effectiveness. Occasional patients have been reported to develop severe paradoxical airway resistance with repeated, excessive use of isoproterenol inhalation preparations. The cause of this refractory state is unknown. It is advisable that in such instances the use of this preparation be discontinued immediately and alternative therapy instituted, since in the reported cases the patients did not respond to other forms of therapy until the drug was withdrawn.

Deaths have been reported following excessive use of isoproterenol inhalation preparations and the exact cause is unknown. Cardiac arrest was noted in several instances.

Precautions: Isoproterenol should not be administered with epinephrine, since both drugs are direct cardiac stimulants and their combined effects may produce serious arrhythmias. If desired, these drugs may be alternated, provided an interval of at least four hours has elapsed. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Duo-Medihaler should be used with caution in patients with cardiovascular disorders including coronary insufficiency, diabetes or hyperthyroidism, and in persons sensitive to sympathomimetic amines.

Adverse Reactions: Overdosage with isoproterenol can produce palpitation, tachycardia, tremulousness, flushing, anginal-type pain, nausea, dizziness, weakness and sweating, while overdosage with phenylephrine can induce cardiac irregularities, central nervous system disturbances and reflex bradycardia.

Dosage and Administration: The recommended dose for the relief of dyspnea in the acute episode is 1 to 2 inhalations. Start with one inhalation. If no relief is evident after 2 to 5 minutes, a second inhalation may be taken. For daily maintenance, use 1 to 2 inhalations 4 to 6 times daily or as directed by the physician. No more than two inhalations should be taken at any one time, nor more than 8 inhalations per hour, unless advised by the physician.

Caution: Federal law prohibits dispensing without prescription.

MEDIHALER-ISO® (isoproterenol sulfate)

Indications: Dyspnea, resulting from the bronchospasm associated with:

1. Acute bronchial asthma
3. Chronic bronchitis
2. Chronic bronchial asthma
4. Emphysema

And as an adjunct in the treatment of drug sensitivity reactions, injected allergens, urticaria, and other allergic manifestations.

Contraindications: Use of isoproterenol in patients with pre-existing cardiac arrhythmias associated with tachycardia is contraindicated because the cardiac stimulant effects of the drug may aggravate such disorders.

Warnings: See above. Do not exceed the dose prescribed by your physician. If difficulty in breathing persists, contact your physician immediately.

Precautions: Isoproterenol and epinephrine should not be used concurrently; combined effects may cause serious arrhythmias. Their use may be alternated if an interval of at least four hours has elapsed. As with all sympathomimetic drugs, isoproterenol should be used with great caution in the presence of cardiovascular disorders, including coronary insufficiency, or when there is a sensitivity to sympathomimetic amines. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Adverse Reactions: Only a small percentage of patients experience any side effects following oral inhalation of aerosolized isoproterenol. Overdosage may produce tachycardia with resultant coronary insufficiency, palpitations, vertigo, nausea, tremors, headache, insomnia, central excitation, and blood pressure changes. These reactions are similar to those produced by other sympathomimetic agents.

Dosage and Administration: See above.

Caution: Federal law prohibits dispensing without prescription.

Riker Laboratories, Div.

Northridge, Calif. 91324

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Design for an ear anti-infective

Designed to act promptly against bacterial pathogens and pain

Otitis media (when the tympanic membrane is perforated) and otitis externa both respond to the bactericidal action of furacin® (nitrofurazone) in Furacin-HC Otic (nitrofurazone-hydrocortisone) Otic. Its broad antibacterial spectrum includes most of the organisms encountered in surface infections (but only certain strains of *Pseudomonas*). The hydrocortisone component in Furacin-HC Otic affords rapid relief of painful swelling.

Designed to let the ear drain freely

The water-soluble base of Furacin-HC Otic permits free drainage and provides a hygroscopic vehicle.

Designed to please and protect the patient

Topical Furacin-HC Otic lets you reserve systemic preparations for systemic infections.

It rarely irritates inflamed epithelial surfaces, and cross resistance or cross sensitization with antibiotics does not occur. In addition, nonmacerating, odorless Furacin-HC Otic softens wax to facilitate removal of cerumen.

Also available: Furacin® Otic (nitrofurazone with nifuroxime and dipiperdon HCl). The wide antibacterial range of Furacin is augmented by the antimycotic activity of Micofur® (nifuroxime). Dipiperdon hydrochloride, an efficient local anesthetic, promptly subdues pain and itching. Indicated in bacterial otitis externa, otomycosis or bacterial otitis media (when the eardrum is perforated).

Precautions: Sensitization to nitrofurazone may occur with prolonged use and is more likely to develop in eczematous otitis externa. To minimize such reactions (a) limit application to a week or less, and (b) avoid use of excessive amounts which may run down the face.

This preparation is not indicated for use in

treatment of cholesteatoma, where surgical intervention is necessary.

Contraindications: The usual contraindications for preparations containing hydrocortisone should be observed, such as tuberculous lesions of skin or ear, acute herpes simplex, vaccinia and varicella, superficial fungus and yeast infections.

Formula: Furacin®-HC Otic contains 0.2% Furacin, brand of nitrofurazone, and 1.0% hydrocortisone acetate in a water-soluble hygroscopic base of glycerin and polyethylene glycol.

Furacin® Otic contains 0.2% Furacin, brand of nitrofurazone, 0.375% Micofur®, brand of nifuroxime, and 2% dipiperdon hydrochloride dissolved in water-soluble, nondrying, hygroscopic polyethylene glycol.

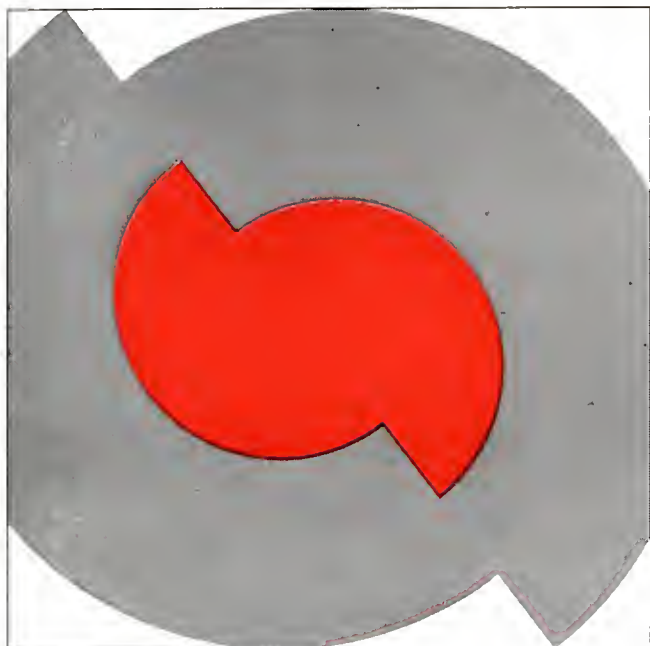


™Originators and Developers of The Nitrofurans
EATON LABORATORIES
Division of The Norwich Pharmacol Company
NORWICH, NEW YORK 13815

Furacin®-HC Otic
nitrofurazone/hydrocortisone

Furacin® Otic
nitrofurazone with nifuroxime
and dipiperdon HCl





from the discord of anxiety...



to emotional harmony

with the aid of antianxiety

Librium® (chlordiazepoxide HCl)

5-mg, 10-mg
and 25-mg capsules

In an age of swift change and challenge, susceptible individuals may experience varying degrees of excessive anxiety. The resulting emotional stress may precipitate significant functional disorders or complicate existing organic disease. In properly individualized maintenance dosage, Librium (chlordiazepoxide HCl) quickly helps relieve anxiety and apprehension, provides useful adjunctive therapy in psychophysiological disorders—yet seldom impairs mental acuity or ability to function. Librium has demonstrated a wide margin of safety in short- and long-term therapy.

Also available:

Libritabs®
(chlordiazepoxide)



Roche
LABORATORIES

Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increase and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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IN THIS ISSUE:

Brain Abscess in Infants and Children

S. JAN EBERHARD, M.D.

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Diagnosis of Brain Abscess in Infants and Children A Retrospective Study of Twenty-six Cases

S. JAN EBERHARD, M.D.

Intracranial abscess continues to be one of the most difficult diagnostic problems in infants and children despite the sophistication of both old and new diagnostic procedures. Although studies of brain abscess in the adult and in mixed age groups continue to appear in the literature and supplement our knowledge of this disease, the pediatric age group continues to be overlooked, with the result that only a few papers have been devoted to the subject, and a definitive, statistically valid series is wanting.

Since the advent of antibiotics it has become apparent from adult series that further reduction in the high mortality rate depends upon earlier, more effective diagnosis. It is the purpose of this paper to: (1) review a series of 26 cases of brain abscess in infants and children at the North Carolina Baptist Hospital from 1947 to 1966; (2) review the literature concerning intracranial abscess in pediatrics; and (3) compare the results of this series with those in the literature of all age groups, in an effort to provide data which will make the clinician more aware of the disease and better equipped to make an early diagnosis.

Review of the Pediatric Literature

The first recorded series of brain abscess in children included 17 cases collected by the German, Wyss,¹ in 1871. Macewen's monograph on diseases of the brain and spinal cord, in 1893, concerned patients of all ages but did include 14 cases in the pediatric age group.² Eleven of the 14 patients were operated on, with only five deaths,

while all three of the patients who were not treated surgically died.

Holt,³ in 1898, was the first English-speaking author to present a series of brain abscesses in infants or children. He collected 32 cases, including 27 from the world literature and 5 of his own, all of which involved patients under 5 years of age, and 13 of whom were less than 1 year old. He was impressed with the rarity of this lesion in children under 5 years of age, especially since 26 of 32 cases were secondary to trauma or chronic otitis, common events in this age group. Of the remaining six cases, three complicated necrosis of the skull, pyemia, and spina bifida respectively, and three were of unknown origin.

Holt concluded, on the basis of autopsy studies of the petrous bone, that in cases occurring in infancy of cause unknown, the source of infection was probably the ears, even though there was no discharge. He also believed that the majority of traumatic cases were acute rather than chronic in onset, and produced definite cerebral symptoms within two weeks after injury; if they did not, the brain abscess was likely to be secondary to some other agent. Development of an abscess after injury to the head without fracture of the skull was rare.

Recommendations concerning diagnosis were meager, since Holt decided that in a large proportion of cases only variable, general symptoms were present, owing to the location of the lesions. Focal symptoms were felt to be misleading unless constant, and often depended upon associated lesions such as meningitis. Only motor symptoms were of value, since sensory symptoms were diffi-

From North Carolina Baptist Hospital, Winston-Salem, North Carolina 27103.

cult or impossible to determine in infants and young children, and many symptoms of extreme diagnostic value in adults were useless in infants. A history of rapid progress fever, otitis, or trauma was considered the most significant featured in the acute case, while the chronic one was more difficult to diagnose, being characterized by a slow, irregular course and low temperature.

Only nine patients underwent surgery, with recovery in five; all patients who were not operated on died. The author concluded that because of "the great amount of shock attending brain surgery in young children, operation should not be urged unless definite localizing signs are present, the principal one being hemiplegia."

In 1899 Doyle⁴ reported a case of brain abscess in a 3-month-old infant who recovered with treatment, but, as Sanford⁵ pointed out in 1928, it is unlikely that this patient really had such a lesion. Doyle then proceeded to comment on all aspects of intracranial suppuration without providing any documentation or data. He believed that brain abscess was rare in infants and old age and that in the former almost all cases were caused by trauma.

Walter⁶ reported two cases in 1922, while Dandy⁷ added another in 1925. All three of these were in infants and were commented on because of hydrocephalus complicating the abscesses. Then in 1928 Sanford⁵ presented 2 cases of brain abscess in infants and reviewed the other 17 cases in the literature (Holt 13, Walter 2, Dandy 1, Doyle 1).^{3,4,7} Contrary to Doyle's earlier statements, Sanford found that trauma and otitis combined accounted for less than 50% of the cases in infants. Cultures were positive in nine cases, all of which were due to a staphylococcal organism, and of the 13 cases in which lumbar puncture was performed, the cerebrospinal fluid revealed an increase in cells in all of them. Eighty-nine per cent of the cases were discovered at autopsy, and the remaining 11% were diagnosed at surgery. Disregarding Doyle's case, mortality was 100%.

The literature remained void of the subject until 1942, when Baumol⁸ added one

case and a discussion of the pathophysiology of brain abscess with reference to preceding case reports. He believed that the course was usually chronic and could be divided into four relatively distinct stages based on clinical signs and symptoms. Also noted was the examination of the cerebrospinal fluid, which almost always disclosed a moderate increase in cells and protein.

Enlargement of the head in infants with intracranial abscess was emphasized by Farley⁹ in 1949, when he reviewed a case of brain abscess in a 3-month-old infant who was treated successfully and recovered. Unlike Holt, the author believed that since brain abscess in infancy may be associated with few physical signs, there should be no delay in using diagnostic measures such as needle punctures and ventriculography in any doubtful case.

Three cases occurring at 12 days, 22 days, and two months respectively were reported by Johnson¹⁰ in 1953. All but the third case were thought to be caused by maternal upper respiratory infection; Johnson recommended antibiotic treatment for all neonates whose mothers have even minor infections at the time of delivery. In 1957 Butler¹¹ added two more cases secondary to neonatal sepsis and reviewed the four cases in the literature (Farley one, Johnson three.) He was impressed by the difficulty of diagnosis in the newborn and felt that the most definite sign was a bulging anterior fontanelle. Munslow,¹² in the same year, added four more cases in infants, with a review of the scant literature. Bulging fontanelles and convulsions were noted in three of four patients, and streptokinase-streptodornase (Varidase) was utilized to prevent hydrocephalus; however, one patient died because of hydrocephalus, and another who lived was hydrocephalic.

Finally, in 1960, Nestadt and others¹³ reviewed 35 cases of brain abscess from Birmingham Hospitals, England, in patients ranging from 5 weeks to 14 years of age, including five infants. Headache was found to be the earliest and most constant symptom; time between the onset of headache and diagnosis or death varied from two

weeks to four months. Focal neurological signs were present in 25 patients, the white blood cell count was elevated in 14 of 22 patients, and cerebrospinal fluid was completely normal in only 3 of 26 patients. Of special importance in diagnosis were headache, listlessness, and drowsiness; vomiting and convulsions were the most common presenting symptoms in infants, who usually had more general signs of infection than children. The author felt that the interval between onset of infection and diagnosis was usually greater than ten days, and that brain abscess should be suspected in any child with signs of cerebral dysfunction more than ten days after the onset of an infective illness.

Thirty pediatric patients with known brain abscess, ranging in age from 2 months to 14 years were reviewed by McGreal,¹⁴ a Canadian, in 1962. He found the most common symptoms to be headache, vomiting, convulsions, anorexia, drowsiness and lethargy, while preliminary signs included variable fever, drowsiness, stiff neck, focal neurological deficits, and signs of increased intracranial pressure. It was concluded that there was no consistent white blood cell pattern, but in most cases the cerebrospinal fluid contained an increased number of cells and an elevated protein level. Definitive diagnosis depended on ventriculography or needle aspiration.

Although study of brain abscess in infants and children due to all causes has been neglected, the association of this lesion with congenital heart disease (CHD) has been more thoroughly studied, especially in the last decade. This association was first noted by Farre¹⁵ in 1814, but was not diagnosed before death and successfully treated surgically until 1946.¹⁶ Since that time the literature has abounded with single case reports, and several series have been reviewed.¹⁷⁻¹⁹

Clarke and Clarke²⁰ reviewed a series of 95 cases in 1952, including 69 from the literature and 26 previously unreported cases. A similar series reported by Newton,²¹ in 1956, included 72 recorded cases together with 7 of his own. Matson and Salam,²² in 1961, made observations on the literature and

analyzed 13 of their cases seen at Children's Hospital, Boston, from 1946 to 1959. They concluded that in comparison with normal subjects, patients with CHD have a higher incidence of brain abscess, and that the history of the abscess tends to be shorter in these patients, confirming earlier reports.^{17-19,21} All 13 of their patients gave some evidence of increased intracranial pressure on admission; 11 had vomited, 8 had headache, and 10 had impairment of sensorium. Ten patients had lateralizing motor signs and eight had convulsions preoperatively. In the experience of these authors, the most valuable single laboratory aid to diagnosis was the electroencephalogram, which located the lesion in the majority of their cases. Eleven of 13 of their patients had an elevated white blood cell count, and in the same number there was a moderate increase in pressure, WBC, or protein content of the CSF. The use of routine arteriography was not recommended because of the increased proneness toward intravascular thrombosis in patients with CHD.

REVIEW OF THE PRESENT SERIES

Material and Method

The records of the North Carolina Baptist Hospital (NCBH) were reviewed from 1947 to 1966. All cases of intracerebral abscess in infants and children (1 day to 15 years of age), confirmed by operation or autopsy, were combined to form a series of 26 cases. No cases of subdural, epidural, or subgaleal abscesses were included.

In studying these cases, special emphasis was placed upon compilation of data from the history, physical examination, and laboratory investigation, all of which are important factors in making the diagnosis of brain abscess. Several other facets of this disease were considered, including age, sex, race, location, etiology, length of history, morbidity, mortality, bacteriology, treatment, and prognosis. It is acknowledged that 26 cases do not represent a statistically significant number; however, until such a series in children appears in the literature, we must be content with the general knowledge that a smaller series provides.

Results

Table 1 summarizes the salient features of each of the 26 cases of brain abscess.

Age, race, and sex incidence

The average age of the patients was 7.8 years, with ten patients ranging from 11 to 15 years, five patients from 1 to 2 years, six patients from 3 to 5 years, and five patients from 6 to 10 years. Only one patient was less than one year old, although there were several suspected cases which could not be verified because permission for autopsy was denied.

Eighteen patients were male and 17 female. That all patients were white is not surprising, in view of the fact that NCBH had little or no Negro population during much of the period from 1947 to 1966.

Etiology and location

Seven patients, five of whom were cyanotic, had brain abscess in association with congenital heart disease. Four of these had tetralogy of Fallot (one of whom was acyanotic), and one—also acyanotic—was believed to have an atrial septal defect. Of the remaining two patients, one had two different brain abscesses five years apart. He had multiple congenital defects consisting of dextrocardia, cor biloculare, and a bicuspid pulmonary valve with stenosis. He was believed to have subacute bacterial endocarditis concomitant with his second abscess, but this impression was not proved clinically. Autopsy revealed vegetation on the common atrioventricular valve consistent with a healing bacterial endocarditis.

Chronic tympanomastoiditis was responsible for four cases of brain abscess. There were no cases secondary to an acute ear infection, the disease was unilateral in only one case, and bilateral radical mastoidectomy had been performed in two of the cases.

Sinusitis was the underlying cause in two cases and was questionable in a third. One of these patients underwent surgery for a frontal sinus abscess before a communicating brain abscess was discovered.

Three cases were apparently secondary to trauma. In one the brain abscess was preceded three months earlier by a subdural hematoma and abscess. A scalp laceration,

which was not treated medically, was a possible cause of the brain abscess that appeared five months later in the second patient. The third patient fell on a nail in a barnyard, incurring a puncture wound of the occipital bone.

The etiology was unknown in nine cases; that is, there was no history or physical finding which revealed a focus of infection. One of these nine may have been secondary to a lung infiltrate, and another may have been due to an inflamed throat and tonsillitis. A third patient (case 24) may have had a brain abscess at birth; if not, it probably developed in the first three weeks of life, but was not diagnosed or treated until he was 2½ years of age. Still a fourth patient (case 25) suffered from lack of respirations for five to six minutes following delivery, and had a bilateral brain abscess diagnosed at the age of 32 days.

Eighteen of the abscesses were single, while eight were multiple; of the single ones, two were multilocular. As seen in Table 2, the frontal lobe was most commonly involved, with the parietal and temporal lobes close behind. It is notable that the occipital lobe was affected only twice, and the cerebellum only once. One case was a multilocular intraventricular abscess without evidence of encapsulation in any of the lobes of the cerebrum. Some of the lesions were so large that they affected as many as three lobes of the cerebrum.

Length of history

The interval between the onset of symptoms or signs and the diagnosis ranged from one day to two years, 50 weeks. Excluding the latter case and one case of 2½ years' duration, the average history was six weeks. When two more unusual cases of 20 and 44 weeks' duration respectively are omitted, the average duration was 3.7 weeks, a figure which represents the average of the majority of cases.

When the seven cases associated with congenital heart disease were considered separately, 12 days was found to be the average duration; with omission of one case, the average duration became ten days, a period considerably shorter than that found when

Table 1
Summary of 26 Cases of Brain Abscess

Case	Age, Race,* Sex	Location of Abscess	Etiology	Length of History	Symptoms	Signs
1.	14 M	Right temporal, multiple	Chronic tympanomastoiditis	6 weeks	Frontal headache, nausea and vomiting, lethargy	Negative until 4 days following admission when temperature spiked to 105 F, patient developed stiff neck, became lethargic and unresponsive
2.	5 F	Right frontal, multiple	Questionable sinusitis	1 week	Frontal headache, malaise, anorexia, vomiting, periumbilical pain, irritability	Temperature 99.2 F, pulse 72 minute; bilateral Babinski signs, bilateral retinal hemorrhages and blurring of nasal optic discs, slight neck and back pain
3.	8 M	Right temporal, single	Chronic otitis media	8 weeks	Headache, sore eyes, lethargy, tender neck, seizures	Temperature 100 F, bilateral internal strabismus, tender neck with bilateral cervical adenitis, 15 pound weight loss, agitation, disorientation
4.	15 M	Right frontal, single	CHD; probable atrial septal defect	2 weeks	Right retro-orbital pain and headache, stiff neck	Temperature 103 F, left Babinski sign, tender right frontal sinus, bilateral internal strabismus, stiff neck, heart murmur
5.	3½ F	Left parietal, single	CHD;* tetralogy of fallot	10 days	Weakness of right hand and leg, slight speech difficulty, lethargy, irritability	Temperature 101 F, flaccid paralysis of right arm, weakness of right leg, heart murmur.
6.	6 F	Right parietal, single	Unknown	3 weeks	Morning vomiting, headache, lethargy, left-sided weakness	Temperature 99.6 F, bilateral papilledema, bilateral sixth nerve palsy, partial left third nerve palsy, left Babinski sign and hemiparesis, hyperactive reflexes on left with ankle clonus.
7.	3 M	Right frontoparietal, right occipital, multiple	Unknown	2 weeks, or 2 years, 50 weeks	Headache, vomiting, lethargy, drowsiness, weakness of left arm and leg, cyanosis, respiratory distress, seizures	Temperature 101 F, Macewen's sign, bilateral papilledema, nystagmus on left lateral gaze, weakness of left side.
8.	15 M	Left temporal, single	Unknown, questionable lung disease	3 months	Frontal headache, nausea and vomiting, drowsiness, lethargy	Temperature 98.6 F, bilateral papilledema, left Babinski sign.
9.	1 M	Intraventricular, loculated	Subdural trauma, abscess and hematoma	1 day	Seizure, unresponsive	Temperature 104 F, pulse 160, respiration 40, dehydration, seizure, responsive
10.	2½ M	Right parietal, single	Questionable trauma, scalp laceration	Acute, 5 days; chronic, 5 months	Headache, left-sided weakness, lethargy, decreased visual acuity, vomiting	Temperature 99.2 F, pulse 80, bilateral papilledema, doll's eye movements, stiff neck, obtunded, left hemiparesis, left Babinski sign, absent left abdominal reflexes, bilateral ankle clonus, incontinence.

TABLE 1 (Continued)

Case	Age Race,* Sex	Location of Abscess	Etiology	Length of History	Symptoms	Signs
11.	15 F	Right frontal, single	Right frontal ethmoidal sinusitis	2 months	Headache, sharp pain in right retro-orbital area, dizzy spells with falling, seizures	Temperature 100 F, slightly obtunded; right lid ptosis, right pupil larger than left, blurred right optic disc, tender right orbit and frontal sinus
12.	15 M	Right temporoparietal, single	CHD; cor-biloculare, dextrocardia, bicuspid pulmonary valve with stenosis	1 week	Vomiting, frontal headache, lethargy, drowsiness, mental confusion	Temperature 100.5 F, somnolence, irritability, right papilledema, cracked-pot sign of skull, left Babinski and Romberg sign, falls to left, murmur, cyanosis, clubbing of fingers
13.	13 M	Right frontoparietal; right temporal, multiple	Bilateral tympanomastoiditis, meningitis	2 to 6 weeks	Frontal headache, seizures, left-sided weakness	Temperature 103 F, pulse 160 per minute, slow labored respirations, dilated fixed right pupil, right leg and upper extremities flaccid and areflexic, bilateral purulent otitis media, in coma
14.	8 M	Right frontal, single	Bilateral tympanomastoiditis, meningitis	2 weeks	Frontal headache, chills, lethargy, drowsiness, vomiting, seizure	Temperature 100.6 F, somnolence, irritability, right papilledema, cracked-pot sign of skull, left facial weakness, left Romberg and Babinski sign, falls to left on walking, murmur, cyanosis, clubbing
15.	8 M	Left posterior parietal, single	Unknown	11 months	Anorexia, nausea, headache, sudden onset of irrationality, unresponsiveness	Temperature 103 F, pupils fixed but reactive to light, unidirectional nystagmus, cracked-pot sign of skull, right ankle clonus, absent abdominal reflexes bilaterally, responsive only to deep pain
16.	15 M	Right frontal, single	Frontal sinusitis	1 month	Right frontal headache, fainting, swelling of right eye	Temperature 101.8 F, dehydration, swollen right eye with pus from incision, murmur
17.	9 M	Left temporal, single	Left otitis media	2 weeks	Left earache, fever, frontal headache, anorexia, vomiting, drowsiness	Temperature 101-102 F, left purulent otitis media, lethargy, disorientation, left papilledema, right Babinski sign, right hemiparesis with hyperactive reflexes
18.	11 M	Right occipital, left frontal, multiple	CHD; tetralogy of Fallot with Blalock procedure	1 week	Left frontal headache, nausea and vomiting, lethargy	Temperature 102.4 F (R), pupils fixed and dilated, bilateral papilledema, bilateral Babinski signs, murmur, cyanosis, clubbing, areflexic and flaccid, comatose

TABLE 1 (Continued)

Case	Age, Race,* Sex	Location of Abscess	Etiology	Length of History	Symptoms	Signs
19.	12 M	Right frontal, single	CHD; tetralogy of Fallot	2 weeks	Right frontal headache, dizziness, malaise, nausea and vomiting, photophobia	Temperature 99.4 F, disoriented to time, drowsy, bilateral papilledema, nuchal rigidity, Kernig's sign, cyanosis and clubbing
20.	5 M	Left fronto-temporoparietal, single	Unknown; questionable sore throat	1 week	Headache, aphasia, dysphagia, lethargy, vomiting, sore throat, seizures	Temperature 102 F, pulse 136 per minute, right hemiparesis, right pupil larger than left
21.	14 F	Left frontal, multiple	Unknown	6 months	Frontal headache, vomiting, fever, weak right arm and leg, slurred speech, drowsiness	Temperature 103.6 F, pulse 120, dehydration, rigid neck, bilateral papilledema and hemorrhages, flaccid right arm and leg, bilateral Babinski, hypoaactive reflexes on right; semicomatose, unresponsive to questioning
22.	3½ M	Left temporo-parietal, single	CHD; tetralogy of Fallot	1 month	Anorexia, lethargy, headache, vomiting, right-sided seizures, abdominal pain	Temperature 99.2 F (R), cyanotic, apathetic, murmur and thrill, clubbing
23.	2 F	Left frontal, single	Unknown	2 weeks		Temperature 100 F, pulse 74, lethargy, drowsiness, bilateral papilledema, crack-pot sound
24.	2½ M	Right parietal, single	Unknown, congenital?	2½ years	Headache, left hemiparesis, seizures	Temperature 100 F, head and chest 21½ and 20 inches respectively, open anterior fontanelle, cracked-pot sign of skull, weakness of left arm, hyperactive reflexes on left
25.	1 mo. F	Bilateral fronto-parietal	Unknown, ? infarction 2½ to anoxia ? neonatal sepsis	24 days	Shrill cry, lethargy, anorexia	Temperature 101.4 F, cyanosis, tachypnea, dehydration, seizures, tense fontanelle
26.	4 M	Left cerebellum	Trauma	5 days	Headache, nausea, lethargy, somnolence	Lethargy, vomiting, stiff neck, red swollen lesion occipital area, temperature 102 F

Table 2
Anatomic Location of 26 Cases of Brain Abscess

Lobe Involved	Single			Multiple		Over-All	
	Right	Left	Total	Lobe Involved	Number	Lobe Involved	Total
Temporal	1	2	3	Right frontal	1	Temporal	9
Parietal	3	2	5	Left frontal	1	Frontal	13
Frontal	5	1	6	Right temporal	1	Parietal	11
Temporoparietal	1	1	2	Intraventricular	1	Occipital	2
Frontotemporoparietal		1	1	Right occipital,		Cerebellum	1
Cerebellar		1	1	left frontal	1		
				Right temporal,			
				right frontoparietal	1		
				Right occipital,			
				right frontoparietal	1		
				Bilateral frontoparietal	1		

Table 3
Organisms Isolated from 19 Cultures of Brain Abscesses

Single			Mixed			
Organism Isolated	No.	Total	Organisms Isolated	No.	Total	No.
Staphylococcus aureus	2	3	Proteus morgagni and		Staphylococcus	7
Micrococcus pyogenes	1		Alcaligenes faecalis	1	Streptococcus	6
Anaerobic Streptococcus	2	4	Bacteroides, beta hemolytic		Proteus	4
Beta hemolytic Streptococcus	2		Streptococcus and hemolytic		Bacteroides	3
Escherichia coli	1	1	Staphylococcus	1	E. coli	2
Proteus mirabilis	3	3	Hemolytic and non-hemolytic		Alcaligenes faecalis	1
Bacteroides	2	2	Staphylococcus, coagulase		Clostridium welchii	1
			positive and negative	2		
			Hemolytic and non-hemolytic			
			Staphylococcus, coagulase			
			negative; E. Coli, Clostridium			
			welchii	1		

considering brain abscess secondary to all causes.

Bacteriology

Cerebrospinal fluid culture yielded no growth in 20 of 21 cases, while hemolytic and nonhemolytic staphylococci, coagulase negative, were grown from one specimen. The lesion in the latter case consisted of an intraventricular loculated abscess from which were cultured the same organisms as were found in the cerebrospinal fluid.

Cultures of the abscess were made in 22 of 26 cases, with growth in 19 and no growth in the remaining 3. A single organism was cultured in 13 cases and mixed organisms were grown in 6. As seen in Table 3, several different gram-negative and -positive organisms were isolated, the staphylococcal and streptococcal organisms being most common. Four of the single organisms cultured were anaerobic, while nine were aerobic; an anaerobe was included in two of the mixed groups.

Symptoms

Headache was the most common symptom in this series. It was present in 24 cases and was the first symptom noted in 14 cases. The only two cases in which it was not reported involved two infants who could not talk. Lethargy or malaise and drowsiness or both were found in 20 patients, while anorexia, nausea, and vomiting were present in 17 cases. The vomiting was frequently, but not always, of the early morning type. It is notable that all of the above symptoms were

found in 15 patients at some time in the history.

Localizing neurological symptoms were present in 15 patients, mainly in the form of localized weakness or paralysis (seven patients) and seizures (ten patients). Change in speech was noted in four patients, irritability in five, and "fever" in four. Other infrequent symptoms included a stiff or tender neck, decreased visual acuity, localized pain, dizziness, and fainting.

Signs

The most common sign was a temperature elevation of 1 degree or more Fahrenheit* found in 19 cases on admission and present in all cases at some time during the hospital course. Only rarely was a subnormal temperature noted.

Papilledema, usually bilateral but unilateral in three cases, was a presenting sign in 12 cases. Babinski's sign was present in nine cases while Brudzinski's sign was elicited in seven. Six patients were totally unresponsive or responsive only to painful stimuli. Other neurological abnormalities noted infrequently were pupil inequality, homonymous hemianopsia, nystagmus, retinal hemorrhage, strabismus, paresis or paralysis, hyperactive or diminished deep tendon reflexes, absent abdominal reflexes, ankle clonus, aphasia, disorientation, and the cracked-pot sound.

Various other physical findings were noted, depending on the underlying cause of

*Normal being designated as 98.6 F orally and 99.6 F rectally.

the brain abscess; for example, cyanosis, clubbing, tender sinuses, inflamed or purulent tympanic membranes, and evidence of trauma.

Accessory clinical findings

Diagnostic studies utilized included white blood cell count, examination of cerebrospinal fluid, skull films, electroencephalography, ventriculography, pneumoencephalography, echoencephalography, brain scan, and carotid arteriography.

As shown in Table 4, the white cell count was greater than 10,000/cu mm of blood in 20 of 26 cases, and was greater than 20,000/cu mm in 8 of the 20. There was a typical "shift to the left" in almost all of the elevated counts.

Cerebrospinal fluid was abnormal in at least one component in 18 of 20 cases. Elevation of opening pressure was noted in all but 1 of 15 cases, while the protein value was increased in 13 of 17 cases. The cell count was within normal limits in only 2 cases, being abnormally high* in the remaining 18.

An electroencephalogram was obtained in only 11 cases, but was grossly abnormal in all of these. Slow (2-3 per second) wave activity with high amplitude was the pattern most commonly seen. This mode of study was effective in lateralizing the lesion in the proper hemisphere in 10 of 11 cases and actually localized the lesion in 9 of these.

Eighteen ventriculograms were obtained, all of which were abnormal and led to localization of a space-occupying mass, thus permitting subsequent definitive diagnosis and treatment. Only five pneumoencephalograms were obtained, of which four were abnormal. That this method of study lacks the advantages of ventriculography and may cause herniation of the brain stem in the presence of increased intracranial pressure accounts for its limited use. On one occasion a normal pneumoencephalogram was obtained from a patient suspected of having a brain abscess, and an abnormal film was not obtained until a subsequent admission when the diagnosis of cerebral abscess was finally made.

Six out of seven carotid arteriograms re-

vealed pathological changes in the cerebrum, manifested by a space-occupying lesion. In one patient the common and external carotid arteries were visualized adequately, but the internal carotids contained no contrast material because the intracranial pressure exceeded the blood pressure. The one normal arteriogram was obtained from a patient who had an abnormal localizing EEG and ventriculogram, and was treated on that basis.

Use was made of the brain scan in three and of the echoencephalogram in two cases. The latter method revealed a shift of the midline structures in both patients, while the former was abnormal in two, but normal in another. This latter patient had an obvious increase in intracranial pressure with diastasis of the sagittal and coronal sutures; diagnosis was made by ventriculography on the same day that the normal brain scan was made.

Skull films revealed suture diastasis in four cases and a shift of the pineal gland in one case. One patient had a small depressed occipital fracture from a puncture wound. There was no evidence of intracranial gas or fluid level, although one patient did have a well-circumscribed, calcified mass in the posterior parietal area, believed preoperatively to be a cyst.

Treatment and mortality

The method of handling these cases depended upon the urgency of each individual situation. The condition of some patients when presented was such as to allow rapid, orderly diagnostic procedures, but at least six patients were comatose or semicomatose when first seen and required emergency diagnosis and treatment.

As can be seen in Table 5, six patients were treated by aspiration with or without repeated tapping; the mortality was 50%. Of the four patients treated by aspiration and catheter drainage, death occurred in 25%. Aspiration followed by subsequent excision was utilized in three patients, with a death rate of 33%. Of ten patients treated initially by complete excision, only two died—a mortality of 20%. Thorotrast or Steripaque was instilled into the abscess cavity in

*Greater than 5 mononuclear cells and/or 1 or more polymorphonuclear cells.

Table 4
Results of Diagnostic Studies

Patient No.	Blood WBC	Opening Pressure (mm H ₂ O)	CSF Cells (mm ³) WBC RBC	EEG	Ventriculogram	Arteriogram	Skull Films, PEG* Brain Scan, Echo-encephalogram
1.	14,800	600	6,300 0	Large slow waves in temporo-occipital region of right hemisphere			
2.	11,500		8 0	Slow wave in right frontal area		Shift of anterior cerebral artery suggestive of mass lesion in right frontal lobe	
3.	32,900		2,165 0	Slow wave focus in right temporal area			PEG—abnormal with mass lesion in right temporal lobe
4.	14,600	500	4,050 0	Bilateral diffuse theta activity			PEG—abnormal with mass lesion in right frontal lobe
5.	19,000				Marked shift of ventricular system to right		
6.	15,400	250	7 50	Slow waves over right parietal area			Skull films—diastasis of coronal and lambdoid sutures; PEG—mass lesion in right parietal area
7.	7,000		120 13		Shift of ventricular system to left	Shift of left anterior cerebral artery to the left	
8.	7,400	600	700 11,300	Slowing over left hemisphere; focus in posterior temporo-occipital region	Shift of ventricular system to right		Skull films—shift of pineal to right
9.	17,000				Dilated ventricles		
10.	12,000						Echo—shift of midline to left; brain scan—mass in right parietal area
11.	9,900	230	134 116	Slow waves over both hemispheres; localized in right pre-frontal region			Echo—shift of midline to left
12.	11,000	240	52 0	High amplitude slow waves in right frontal region	Shift to left		
13.	23,500	200			Shift to right		

*Pneumoencephalogram

Patient No.	Blood WBC	Opening mg Pres-sure (mm Hg)	CSF Cells (mm ³) WBC RBC	EEG	Ventriculogram	Arteriogram	Skull Films, PEG* Brain Scan, Echo-encephalogram
21.	12,000			Slow wave activity over left hemisphere, concentrated in left frontotemporal region	Shift to right	Abnormal with a left frontal mass lesion	
22.	9,600		2	64			
23.	11,000	600			Dilation of both ventricles with mass lesion left posterior frontal lobe		Skull films abnormal with diastasis of coronal and sagittal sutures; brain scan normal
24.	24,000			Mass lesion in right parietal region	Dilation of lateral ventricles and displacement to left		Skull films—calci-fied mass lesion in right posterior parietal area
25.	24,000		3	0	Bilateral cavities in frontoparietal areas communicating with the lateral ventricles		Brain scan—concentration in right frontal region with extension across midline
26.	9,300	400	51	0			Skull films—depressed fracture of left occipital area

many cases in which aspiration was a part of the procedure used. Antibiotics were administered both at the operative site and systemically, depending on the mode of treatment.

Death claimed all three of the patients who were not treated surgically. The first of these (case 11) had equivocal clinical findings on admission to the hospital. She was to have had a carotid arteriogram on the following morning when a large abscess of the frontal lobe ruptured into the lateral ventricle, causing her demise. The second patient (case 12) was a mentally retarded boy who had been in coma for 36 hours prior to admission. His spinal fluid was grossly purulent; antibiotics were given, but he died a few hours later. The third case involved a 2-year-old female with tetralogy of Fallot (case 23) who was being evaluated for cardiac surgery. Her course was rapidly downhill, ending in what was thought to be cerebral thrombosis; autopsy revealed brain abscess.

The overall mortality for the 26 cases was

Table 5
Treatment and Mortality

Mode of Treatment	No. of Patients	No. Living	No. Mortality Dead (Per Cent)
Aspiration with or without repeated tapping	6	3	3 50
Aspiration with catheter drainage	4	3	1 25
Aspiration with subsequent excision	3	2	1 33
Excision	10	8	2 20
No surgical treatment	3	0	3 100

38%, with a 30% surgical mortality, contrasting with a 100% death rate for those patients who received no surgical treatment.

Follow-up

Upon discharge from the hospital the patients in this series were placed on a regimen of prophylactic anticonvulsants and observed at monthly to yearly intervals depending on their condition. Of the 16 living patients, 9 have been observed regularly while 7 have been lost to follow-up; of these 7, however, 4 were seen for 1 to 11 years before losing contact. Only three patients failed to

Table 6

Case No.	Treatment	Treatment, Sequelae, and Follow-up Sequelae	Follow-Up
1.	Excision		Autopsy denied
2.	Aspiration followed by excision	None	Lost to follow-up after one clinic visit—in excellent condition
3.	Excision	Seizures	Lost to follow-up after 6 years
4.	Excision		Autopsy revealed cerebral edema with brain stem compression
5.	Excision	None	Had Potts' procedure at 3 years 9 months; now 13 and doing well
6.	Repeated aspiration	Seizures, mental retardation	Seven year follow-up
7.	Excision	None	Patient in good condition after 13 years follow-up
8.	Excision	Rare seizure	Patient in good condition after 10 years follow-up
9.	Antibiotics		Died under care of local physician after one month
10.	Repeated aspiration	Blind, left hemiparesis, sustained ankle clonus	One year follow-up
11.	Aspiration (after rupture)		Autopsy denied
12.	Antibiotics		Autopsy revealed brain abscess, subdural empyema, meningitis
13.	Aspiration followed by excision		Autopsy revealed brain abscess, vegetations on common A-V valve consistent with a healing bacterial endocarditis. Immediate cause of death was pontine hemorrhage
14.	Repeated aspiration with catheter in place	Seizures	Did well for 5 years when abscess recurred or a new abscess formed; patient died (RLE-13) despite treatment
15.	Aspiration followed by excision	Right homonymous hemianopsia	Lost to follow-up after one year
16.	Aspiration with catheter in place		Autopsy denied; subdural and epidural abscesses also present
17.	Aspiration with catheter in place	Communicating hydrocephalus, blind, mild ataxia	Lost to follow-up after 3 years; in school for the blind
18.	Repeated aspiration		Autopsy denied
19.	Aspiration		Autopsy revealed brain abscess
20.	Repeated aspiration with catheter in place	Seizures	Thirteen year follow-up; B+ student
21.	Excision	Right arm paralyzed, hemiplegic gait	Lost to follow-up after one year
22.	None		Autopsy revealed tetralogy of Fallot, vegetations consistent with SBE of pulmonic valve and infundibulum, and brain abscess
23.	Excision	Slightly spastic gait	8-month follow-up; chanioplasty required 3 months after discharge
24.	Excision	None	Lost to follow-up
25.	Repeated aspiration	Incipient hydrocephaly	Patient recently discharged; ventricles dilated with only 1 cm cortex anteriorly and 2 cm posteriorly
26.	Excision	Temporary unsteady gait	Doing well without sequelae

return after discharge from the hospital. Continuing efforts to locate the seven patients mentioned above have been without result.

Morbidity and sequelae

Residual defects fell into four categories (Table 6): (1) seizure activity; (2) localized neurological abnormality; (3) mental retardation; (4) hydrocephalus. Eleven of 16 patients were found to have defects in one or more of these four areas, while 5 patients were without residual damage.

Six patients had one or more seizures. Four of these had seizures alone, while the fifth exhibited objective evidence of mental retardation and the sixth had hydrocephalus. It is notable that the above patient and one other were the only ones with apparent mental retardation as a complication. There has been no known instance of status epilepticus.

Localized neurological abnormalities were noted in 5 patients; blindness and hemiparesis in 2, ankle clonus and homonymous hemianopsia in 1 each and abnormal gait in 3. One patient (case 17) acquired communicating hydrocephalus which was treated by

a lumbar subarachnoid-peritoneal shunt; the other hydrocephalic patient (case 25) will require shunting in the near future.

Prognosis

In this series of 26 patients it is noted that 10 died and 11 suffered from sequelae, while only 5 were considered to be perfectly normal after removal of the abscess. In some cases the ultimate prognosis depends upon some underlying disease. For example, a patient with tetralogy of Fallot (case 5) had a brain abscess removed at 3 years of age, followed by Blalock's procedure nine months later. She is now doing well at the age of 13 without any complication secondary to the brain abscess; her prognosis will depend upon the success of a definitive procedure for repair of her underlying cardiac disease.

Seven patients were admitted in a semi-comatose or comatose state; four of these died, while the three survivors suffered residual damage. Of four patients in whom the brain abscess ruptured into the ventricular system, three died and the fourth was subsequently blind and severely retarded.

(To be concluded)

I lately saw the symptoms of a phthisis occasioned by a small bone sticking in the bronchae. It was afterwards vomited along with a considerable quantity of purulent matter, and the patient, by a proper regimen, and the use of the Peruvian bark, recovered.—William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Philadelphia, Richard Folwell, 1799, p. 129.

Hints and Kinks from Poor Richard's Clinical Almanac

BAXTER G. NOBLE, M.D.

At the risk of appearing unorthodox in an era of superspecialization, I have selected several unrelated topics, gambling on the chance that some of the ideas covered will be useful. Obeying the fashionable dictum of complete subject-title dissociation, I have labeled this conglomeration "Hints and Kinks from Poor Richard's Clinical Almanac."

Included are the following subjects: (1) detecting intra-abdominal hemorrhage, (2) maintaining sterility of fever thermometers, (3) increasing the safety of an EKG machine, (4) an effective method of pulmonary resuscitation, (5) improving intestinal suction-decompression, and (6) some clinical applications for the transistor radio.

Detecting Intra-abdominal Hemorrhage with the Electrician's Resistance Meter

An abundance of surplus electrical and mechanical components is on the market at negligible cost. And since medicine continues to lag behind other sciences by about 50 years, many of these commercial devices can be adapted to clinical application with minimal outlay and alteration.

An example of such a device is the electrician's circuit-testing meter, which can be utilized to detect intra-abdominal hemorrhage. Quite frequently in trauma cases, despite all available clinical, laboratory, and x-ray aids, the presence or absence of significant intraperitoneal bleeding cannot be ascertained short of laparotomy. A simple piece of electrical equipment known as the ohm-meter can sometimes provide a way out of this predicament. An ohm-meter is a device for indicating electrical resistance. For \$25 one can be purchased at most radio parts stores under the label "volt-ohm-milliammeter" or "multitester."

Attach an EKG electrode to each of the meter's two test leads. To test for blood in

the flanks, set the tester to the high resistance range and hold one electrode firmly against the xiphoid area with the patient supine. Next, starting in the back and moving toward the umbilicus, test each flank by momentarily placing the exploring electrode against corresponding points on the skin. Over the area containing free blood you will frequently note a sharp drop in electrical resistance as evidenced by an exaggerated swing of the instrument's pointer. This change is apparently due to the increased electrical conductivity of pooled blood. The multimeter is also a sensitive indicator of underlying blood vessels, and can help in locating a hidden vein or artery.

An Easy Way to Maintain Sterility of Fever Thermometers

Did you ever worry about the sterility of the temperature-taking techniques in our hospitals and offices? We insist that all surgical instruments, gloves, syringes, needles, dishes, and even food be carefully sterilized and rendered bacteria-free before use. Yet we watch an attendant gaily plunk a thermometer, fresh from the mouth or rectum of one patient, into a container of antiseptic that has been progressively diluted by pooled saliva or mucus. Then a couple of minutes later we see the thermometer shoved into the mouth of the next waiting patient. If the second victim is lucky and nobody got the instruments mixed up, he will escape with only a generous seeding from his predecessor's salivary secretions and oral flora.

Of course this cold chemical sterilization is the best we can do with a glass thermometer and should be moderately effective, with proper techniques. However, precautions too often fall through in institutions and offices, especially when help is short and the work load excessive.

Some years ago, out of curiosity, I obtained cultures and smears from thermometer jars in the emergency rooms and wards at a teaching hospital. One sampling yielded

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the following: (it was a real field day for the lab's green thumb) *Aerobacter aerogenes*, group A beta-hemolytic strep, *Hemophilus influenza*, *Candida albicans*, *Neisseria meningitidis*, and a 5-mm hunk of chewing gum. From a dozen other unhealthy looking jars marked "oral" we chalked up the following animal and vegetable life: *Entamoeba coli*, *Neisseria catarrhalis*, *Neisseria gonococcus*, coagulase-positive *Staphylococcus aureus*, *Proteus vulgaris*, *Actinomyces*, lactobacilli, *Pseudomonas*, *Alkaligenes fecalis*, and a better than generous crop of coliform bacilli. Certainly such fertility should provide a veritable Garden of Eden for the enteric and hepatitis viruses.

A simple way to prevent spread of contamination is to isolate the thermometer from direct contact with the patient's mouth by means of a thin disposable cover. Grocery store plastic wrap works very well for this purpose. It is so thin that heat transfer is virtually unhampered, yet tough enough not to break or leak. All you need do is drape a 5-inch square of this plastic over the bulb end of your thermometer so that it covers most of the stem. Thus enveloped, the instrument is inserted sublingually in the usual fashion and the cover discarded after each use. Because of the plastic's slight insulating effect, I leave the thermometer in the mouth 5 minutes.

How to Increase the Safety of Your EKG Machine

This section deals with a few shock hazards relative to electrocardiography. The average EKG machine of today can be electrically unsafe from at least two separate points, and it could produce serious or even fatal electrical shock to the patient under a variety of conditions.

To understand this better, let's consider the effects of extraneous electricity on the heart. There are three pertinent myocardial reactions which I will classify as pacemaking, ventricular standstill, and ventricular fibrillation.

Pacemaking is essentially ventricular extrasystole triggered by electrical pulses of very low magnitude, introduced by electrodes at or in the ventricle or on the chest wall op-



Fig. 1. Fusing system for EKG leads.

posite it. They are usually harmless, and in fact are utilized in machinery that keeps a crippled heart going.

A second and much more serious possibility is ventricular standstill. This is the momentary result that one is striving for when defibrillating a heart. It requires large amounts of electricity passing directly through the ventricles. Frequently, but not always, the heart will resume its normal beat within seconds, but it may instead go into ventricular fibrillation—the third type of reaction. Ventricular fibrillation may also be the immediate complication of electrical shock to the heart, especially if that shock happens to occur at the vulnerable repolarization or T-wave of the cycle. A current of 20 milliamperes passing through a ventricle may cause fibrillation. This is about the amount drawn by a pocket transistor radio. A current of 100 milliamperes is almost certain to cause fibrillation, and currents as small as 0.02 milliampere have been known to do so.¹

The voltage necessary to force a fatal amount of electricity through the heart varies with body resistance, as determined by many factors such as skin moisture and point and area of contact. For example, currents reaching the heart through both hands and arms or through a hand and a foot would be considerably diluted, and a patient might tolerate 1,000 or more volts of shock (but don't try it). On the other hand, currents introduced at the precordial area have a short direct path to the ventricles, and as little as

50 volts or less at the vulnerable part of the cycle could well be fatal. With electrodes placed directly against the heart, a scant 0.02 of one volt may initiate fibrillation.

Thus the degree of a potentially fatal shock varies from very small to very large, depending on the resistance interposed and the proximity of the source to the heart.

Now, with these facts in mind, let's look at the layout of the typical EKG machine. It operates on AC house current and derives its power from a step-up transformer. As we know, one side of all house wiring is grounded; so if we happen to touch the "hot" side and the earth, or any grounded metal object such as a water pipe or radiator, we will get a shock.

Now the step-up transformer in many electrocardiographs is but a power transformer borrowed from the radio industry because it is cheap and circumvents the expense of engineering one suited to the purpose. Its main shortcoming is that the normally isolated primary coil sometimes becomes short-circuited to the secondary coil, or one side of the primary coil may become accidentally grounded to the amplifier chassis. This will cause all exposed metal parts of the instrument, as well as the patient leads (especially the electrode to the right leg), to assume a 110-volt potential with respect to ground. Furthermore, the machine will continue to function as usual, giving no warning that anything is wrong. Now, if the patient should reach out and touch an adjacent radiator, a sink, or the metal portion of his electrically operated bed, he will receive a potentially dangerous shock.

An even more startling aspect of the vacuum tube EKG machine lies in the close physical proximity of the high voltage plate electrode and control grid within the vacuum tube itself. The plate electrode carries an electrical charge with respect to ground of 60 to 250 volts at 200 milliamperes, both in excess of the cardio-lethal values already mentioned. The grid electrode, a wire mesh suspended only 2 mm away from the plate, is connected, in some older models, directly with your patient through the limb or precordial leads. Normally the control grid, and

hence all patient leads are at zero electrical potential, and all is well. But suppose that through heat and long use, or as a result of mechanical vibration, there is sufficient warping or even breakage of the tube elements to shift the control grid electrode away from its original position by 2 mm. Now it will touch and make direct electrical contact with the plate. The result is a potentially lethal 60 to 250 volts of electricity surging through the heart from the precordial lead, and returning by way of the right leg lead to the ground or negative connection on the amplifier.

What can be done about these dangers? The situation isn't actually serious enough to justify calling your lawyer or raising your malpractice insurance when you make EKGs. Statistically, the chances of trouble are still small. However, if your machine is old, you could increase its safety by fusing the limb leads. Simple adapters can be made from regular automobile inline fuse holders, with plugs and receptacles on either end, so that they can be interposed between each EKG electrode and its lead wire. The cost of components is about 75 cents for each lead. Any radio parts store has them, and any electrician or radio repairman can assemble them. Commercially available fast-blow 2-milliamperere fuses should ordinarily interrupt the circuit before a dangerous quantity of electricity saturates the body.

An Effective Method of Pulmonary Resuscitation

Most of us are confronted from time to time with the task of attempting artificial respiration in a medical emergency, and the circumstances under which we must work are usually less than ideal. More frequently than not, the unconscious and often obese subject is fully clothed and lying supine, in a position most inappropriate to conventional resuscitation. You can roll him over and try the Neilson technique; however, this maneuver can present several obstacles. First, turning him may be physically impossible due to lack of space or manpower. Second, valuable time is lost. Third, when you get him in position, it becomes impossible to administer cardiac massage if needed. And finally the



Fig. 2. Cardio-massager modified for pulmonary resuscitation.

acrobatic maneuvers required may overtax your physical prowess. One popular but ineffective approach utilizes the bilateral squeezing of the victim's lower rib cage. In my experience this is an excellent way to crack ribs and homogenize the abdominal viscera without accomplishing much else.

The following method works well and can be applied to the fully clothed patient, on his back, where you find him. It involves placing the palms and heels of your hands over the patient's right and left upper anterior thoracic areas. Then you exert a quick, firm anteroposterior thrust followed by release of pressure. If there is any spontaneous breathing, synchronize your compression just before or at the peak of inspiration. The process is repeated about 25 times per minute, increasing the rate if there is carbon dioxide retention. A grunting sound coincident with each thrust and produced by the exit of air past the patient's vocal cords confirms the degree of ventilation and the absence of major obstruction. The procedure aerates the lungs well, especially in the emphysematous patient with chronically over-inflated lungs and a rib cage that is immobile except in the upper anterior aspect. Such compression ventilation can indeed be lifesaving in carbon dioxide narcosis.

If prolonged artificial respiration is necessary and the hospital has a hand-operated external cardiac massage machine, you can rig up a mechanical compressor. Simply place a small rigid flat object such

as a chart holder, clip board, or book over the upper anterior part of the patient's chest. Next position the machine's rubber footpiece at its center. Elevation and depression of the instrument's lever will now move air in and out of the patient's lungs and you can assign a relatively untrained person to its operation. Thus modified, the procedure is less tiring, and respiratory cycling can be more efficiently synchronized.

A Simple Method for Improving Intestinal Suction-Decompression²

"The effectiveness of an intestinal suction-decompression machine is improved by the addition of a simple air leak device. The system is then maintained at a constant low negative pressure that can be precisely regulated.

"The attachment is made from a disposable fluid administration set. Instead of being inverted, the intravenous drainage bottle is left upright, and the air pulled in travels down the length of the immersed air inlet tube and bubbles up through the liquid before it passes into the bottle. The negative pressure needed to allow air to leak into the system is determined by the length of the water column occupying the submerged portion of the air inlet tube—about 10 cm for a

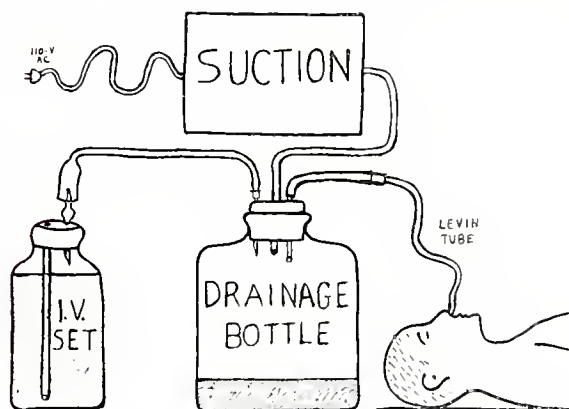


Fig. 3. Diagram of low-suction attachment for improving intestinal drainage.

500 cc flask. Thus no air leaks into the system until the negative pressure exceeds 10 cm of water, about 8 mm of mercury. At that point, the air leaks and prevents any increase in the negative pressure . . .

"A pressure of 10 cm of water—less than one-tenth that of many conventional suction

machines—practically eliminates intestinal tube obstruction by mucosal valve-like action and minimizes possible trauma to the gut from excessive suction. The steady stream of bubbles in the bottle provides a foolproof indication of suction . . .

"The technique eliminated time-consuming irrigations, repositioning, and other manipulations required to keep tubes functioning properly. Compared with the conventional system, it removed two to three times the volume of intestinal fluid and gases in the same period."

Some Clinical Applications of the Pocket Radio

Monitoring pacemakers

As time goes on, more physicians in general practice are treating patients who have artificial pacemakers. The average implantable pacemaker does well to give two or three years of trouble-free service. After that, battery exhaustion or electrode and circuit failure may produce such complications as complete or intermittent escape from pacing control, abnormally slow pace-making, or harmful "runaway pacemaking." The clinical manifestations of slow pacing and of escape may be bradycardia, dropped beats, or even Stokes-Adams syndrome, depending on the intermittency of the trouble. A runaway pacemaker on the other hand, may produce a very rapid heart rate, with a grave symptom-complex closely mimicking, and frequently clinically misdiagnosed as, ventricular tachycardia.

On receiving a front-line emergency call to one of these situations, take along a pocket transistor radio. It's a poor excuse for music but does a wonderful job of monitoring a pacemaker. Turn up the volume and set the station selector to a quiet spot on the dial. Next bring the radio near the patient at the area of his implanted pacemaker. You should hear a short burst of static with each pacing pulse. Now count these static signals. If they are somewhere between 60 and 85 per minute, the rate is normal. But if they are very rapid or very slow, if they are intermittent, or if they are irregular in frequency or intensity, there is probably a circuit failure. Next, feel the patient's peripheral or carotid pulse. There should be a

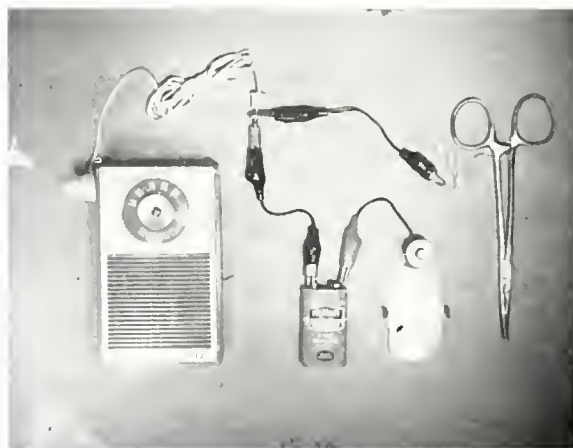


Fig. 4. Transistor radio adapted as locator for metallic foreign bodies.

pulse beat following each radio signal at a short but constant interval. If this interval varies in length, or if a pulse beat fails to succeed each static signal, there is partial or complete escape from pacemaker control. On the other hand, if you hear a very rapid pacing signal with the pulse synchronized to it, you are faced with a runaway pacemaker, with attending potentially grave consequences.

Locating metal fragments

Many of us who have attempted to remove buried metallic fragments from a wound may have been reminded of the proverbial "needle in the haystack." Even with the help of x-ray, the task can be extremely frustrating. When you finally zero in on your target, clamp down on what surely is the missing piece of metal, and take a confident yank, you may instead come out with a generous chunk of muscle, nerve, or tendon adorning the jaws of your hemostat.

When you are next faced with this problem, you might try the following improvised metal locator. The components needed are a transistor radio with earphone, a dry cell battery, some electrical hook-up wire, an EKG electrode, and a short length of sterile steel suture wire.

First tape the earphone with its back flat against the antenna coil end of the radio case. Now connect the earphone plug in series with the battery and the EKG electrode, using an alligator clamp or hemostat to secure the connections at the plug. Like-

wise fasten a generous length of sterile suture wire to the other pole of the plug, and, using sterile technique, wrap the opposite end around one handle of the Kelly hemostat or other instrument that is to serve as a probe. Finally tape the EKG electrode to the skin near the wound. When you probe the wound and touch any piece of metal therein, you should get a loud blast of static from the radio. This is because contact between your probe and the metal completes the circuit through the earphone and generates electromagnetic signals that are heard in the radio.

Inserting a Levin tube

Trying to get a Levin tube down the alimentary tract of an apprehensive, gagging, choking patient can be a frustrating experience. After shoving a couple of yards of tubing down his throat without striking gastric juice, while his eyes accuse you of murder, you soon begin to wonder whether he might actually be right. Your misgivings are further heightened when he turns lavender after you have syringed in a quart of water without getting back a single drop. Suddenly you would like to know just where that little tube has snaked its way to.

Two transistor radios taped back to back serve as a good ferrous metal locator and may be used to ascertain the position of a magnetically tagged Levin tube in the body. This application is due to the fact that the oscillator of one radio superimposes a beat note on the station being received by the other. Bringing a magnet near them detunes the circuits slightly and changes the frequency pitch of the beat note.

As a magnetic marker, I use a tiny magnetized steel slug or permanent magnet, about an inch long and about the diameter of a BB shot. This is wedged securely into the tip

end of the Levin tube. It weights the tube slightly and helps it to go down better, as well as setting up a weak magnetic flux around its tip. This magnetic field can be detected outside the body by means of an electronic metal locator or with a small compass.

The one transistor radio is set to a station at the high frequency side of the band. The other is then tuned until a tone or whistle is heard in the first. Now moving the radios back and forth across the abdomen, you should detect a change in pitch of the whistling tone when opposite the Levin tube's magnetic tip. Should you run out of radios, a simple sensitive detector is a toy compass; its pointer will move or spin around on approaching the underlying magnet.

Summary

The following clinical aids are discussed: (1) detecting intra-abdominal hemorrhage with the electrician's resistance tester; (2) maintaining sterility of the fever thermometer with a disposable plastic cover; (3) increasing the safety of an EKG machine by fusing the limb leads; (4) an effective method of pulmonary resuscitation; (5) improving intestinal suction-decompression by a simple attachment to conventional equipment; (6) using the pocket transistor radio to monitor an implantable pacemaker, to help locate metallic foreign bodies, and to ascertain the position of a magnetically tagged intestinal tube.

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Late watching, and drinking strong liquors, which generally go together, can hardly fail to destroy the lungs. Hence, the *bon companion* generally falls a sacrifice to this disease [consumption].—William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Philadelphia, Richard Folwell, 1799, p. 129.

Liver "Imaging" with Radionuclide Tracers

ROBERT H. WILKINSON, JR., M.D.

In recent years the liver scan has become an important and in many hospitals a routine diagnostic procedure in the evaluation of liver disease. The earliest radionuclide procedure for identification of hepatic space-occupying lesions involved a multiple point count monitoring procedure. This procedure was replaced by rectilinear scan imaging following the publication of work by Stirrett and others.¹ These investigators reported the successful scan-imaging of the liver and the identification of metastases within the hepatic image. Since their report in 1954, hepatic imaging using radionuclide tracers has become a valuable and routine diagnostic procedure.

Materials

The radiopharmaceuticals used in hepatic imaging may be divided into two groups. The first comprises those radionuclide tracers which are taken up by the hepatic polygonal cells. Iodine-131 labeled rose bengal is an example of such a tracer. The second group comprises those radiopharmaceuticals which are phagocytized by the hepatic reticuloendothelial (Kupffer) cells. Examples of these include gold-198 colloidal gold, iodine-131 labeled microaggregated human serum albumin, technetium-99m sulfur colloid, and a colloidal form of indium-113m. The first three are commercially available from several pharmaceutical companies. The Au-198 colloidal gold is the most frequently employed tracer in this group. Technetium-99m sulfur colloid and In-113m colloid show considerable promise. We use Tc-99m sulfur colloid routinely, but occasionally use I-131 labeled rose bengal in particular clinical problems to be discussed later.

All these agents are administered intravenously. The dose for Au-198 colloidal gold is 150 to 300 microcuries. Our routine dose

of Tc-99m sulfur colloid is 2 millicuries. We have used as little as 0.75 millicurie, and as much as 5 millicuries have been reported. For the I-131 labeled rose bengal liver scan, 150 microcuries is the maximum dosage.

Both the conventional rectilinear scanners and the stationary imaging devices (such as the Anger-type scintillation camera) are appropriate for liver scanning. The rectilinear scanners have the advantage of presenting a "life-size" hepatic scan image and permit the outlining of a palpable mass on the film. The commercial Anger-type scintillation camera has an attachment for obtaining a 1:1 image on radiographic film, but does not readily lend itself to outlining masses.

Routine Liver Imaging Procedures and Their Interpretation

Preparation of the patient is necessary only if one uses I-131 labeled rose bengal. When it is used, the patient should receive Lugol's solution preceding the study to "block" the thyroid uptake of I-131.

A good, standardized scanning technique should be employed. Information may be lost with improper attention to technique, and subtle areas of decreased tracer activity can be lost in an hepatic sea of photographic blackness.

The routine hepatic study should include anterior, right lateral, and posterior image projections. A left lateral image projection is desirable but not mandatory. In several instances, a lesion has been identified with certainty on only one of these views. We have had one case in which the left lateral image projection alone revealed a space-occupying lesion within the left lobe of the liver. This case was subsequently proved at autopsy.

The time required for a four projection study is prohibitive unless one has a dual detector rectilinear scanner or a stationary imaging device. When I-131 labeled rose bengal is used, the count rate and the tracer's rapid excretion through the biliary tract make it difficult to obtain more than two views.

Read before the North Carolina Chapter, American College of Radiology, Southern Pines, November 2, 1968.

From the Division of Nuclear Medicine, Duke University Medical Center, Durham, N. C. 27706.

Other papers from this meeting will appear in subsequent issues.

Figure 1 illustrates a normal liver scan study performed with a commercial dual detector rectilinear scanner. The tracer employed was Tc-99m sulfur colloid. All four projections were obtained. Note that the spleen as well as the liver are delineated with this particular tracer.

Following the anterior view and prior to moving the patient, the abdomen is palpated. A palpable liver or any palpable hepatic mass is outlined on the dot and/or photoscan. This is generally not readily accomplished with stationary imaging devices. We feel that at the conclusion of the study a 6-foot,

scans. Figure 1 demonstrates one of the more frequent liver contours.

A common and normal variation on the anterior scan view is the scalloped indentation along the medial border of the right lobe of the liver. Generally this represents the bed of the gallbladder, although a tumor in this area can give a similar appearance. If one is not certain, an I-131 labeled rose bengal liver scan can be of assistance. This material is excreted promptly into the biliary tract (unless there is severe hepatic disease or biliary tract obstruction) and often remains in the gallbladder for a period of time sufficient

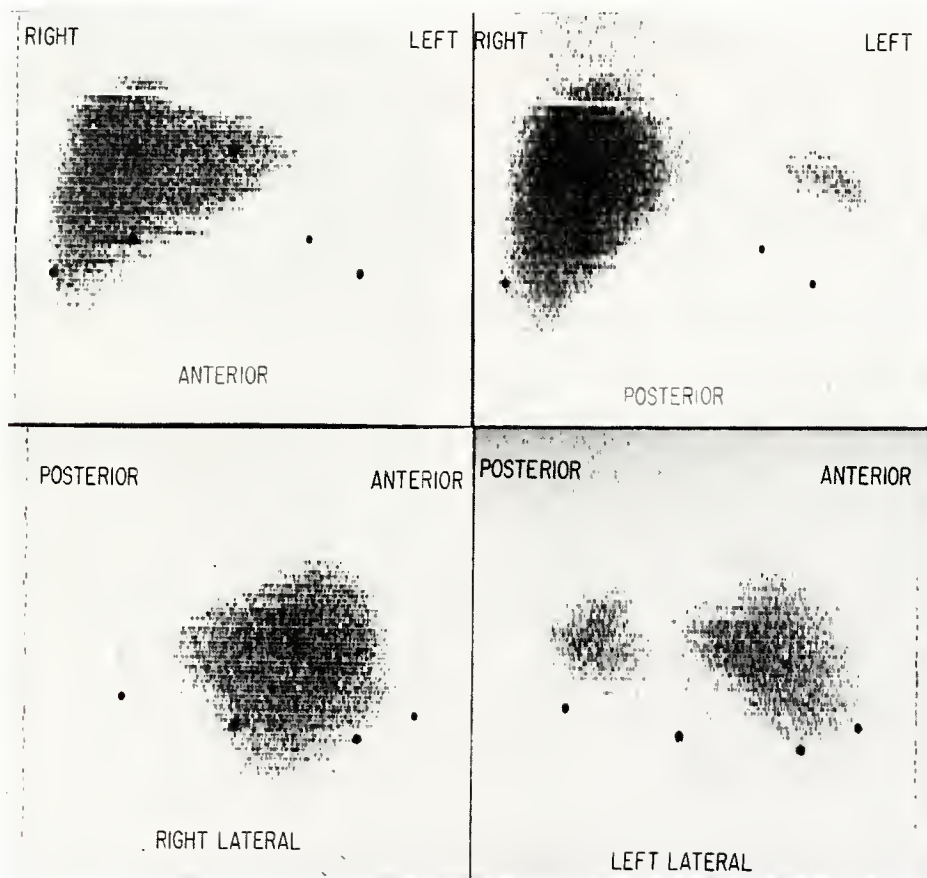


Fig. 1. A normal liver scan using Tc-99m sulfur colloid.

supine, mid-respiration, 14 x 17 inch, lower thoracic - upper abdominal roentgenogram centered over the xiphoid is a desirable interpretative addition to the scan study.

Interpretation of the liver scan requires an appreciation of the variations in contour of the normal liver. McAfee and associates² have described and catalogued these variations, and perusal of their article is essential for anyone beginning to interpret hepatic

to permit its identification. The gallbladder will appear as an area of increased tracer activity along the medial border of the right lobe of the liver.

In general, liver image abnormalities will appear as either focal areas of markedly decreased or absent tracer activity, or as diffuse, uneven tracer activity. The focal areas of decreased or absent tracer activity are classified as "space-occupying lesions." Typi-



Fig. 2. Anterior liver scan view in a patient with hepatic metastasis. The tracer was Tc-99m sulfur colloid.

cal examples of these lesions are metastatic neoplasm, primary hepatoma, cyst, abscess, laceration, and infarct.

Uneven tracer activity may be loosely classified as "diffuse hepatic parenchymal disease," examples of which include cirrhosis, hepatitis, amyloidosis, and hemochromatosis. A more complete list may be found in the section on liver scanning in Wagner's textbook.³ The abnormal hepatic images can be misleading in regard to space-occupying lesions and diffuse parenchymal disease. For example, diffuse small metastatic lesions can give the appearance of a diffuse hepatic parenchymal disease. Conversely, areas of cirrhosis can present the appearance of large space-occupying lesions. Figure 2 is an anterior liver scan projection obtained from a patient with known carcinoma of the colon. This study demonstrates multiple focal areas of decreased tracer activity throughout the hepatic image. These are examples of multiple hepatic space-occupying lesions and represent metastases.

The size of the space-occupying lesions that may be identified has been studied by Wagner and associates.⁴ They found that lesions measuring less than 1.7 cm at the liver surface, or less than 2.5 cm at a depth of 10 cm within the liver, cannot be imaged. Gottschalk⁵ has discussed the problems encountered in satisfactory imaging of space-occupying lesions due to collimation factors and patient breathing. He has reported a method for eliminating the "breathing" factor with the use of a stationary imaging device.

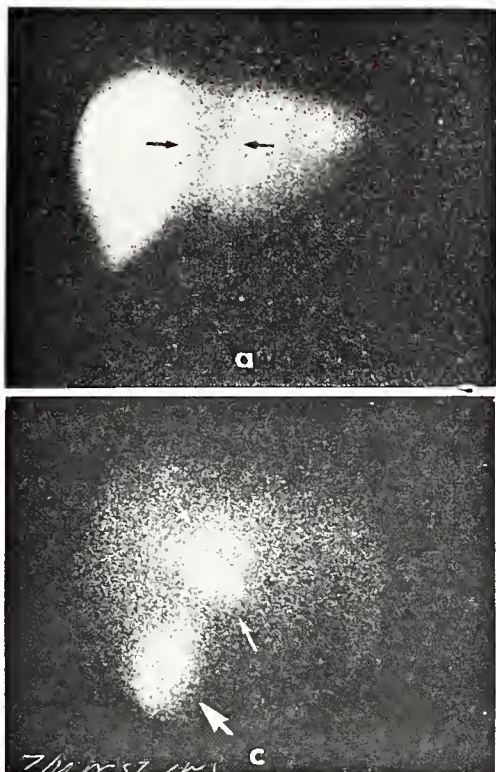


Fig. 3. Posterior liver scan view in a patient with severe cirrhosis. The tracer was Tc-99m sulfur colloid.

Certain characteristics of Au-198 colloid gold, Tc-99m sulfur colloid and I-131 labeled rose bengal extend their interpretative value beyond merely delineating the liver. A hepatic study using Au-198 will normally not demonstrate the spleen. Several investigators⁶ have reported that the spleen will be imaged in "moderately severe" to "severe" diffuse liver disease such as cirrhosis. This finding can aid in the diagnosis of severe hepatic parenchymal disease. Tc-99m sulfur colloid, on the other hand, will normally appear in both the liver and spleen, and thus both organs can be evaluated. (See Fig. 1)

We have observed that in the more to severe liver disease, the spleen will appear on the anterior view, demonstrating more tracer activity within the spleen than in the liver. (It should be recalled that the spleen is normally positioned posteriorly.)

We have also noted that in the more severe liver disease, tracer activity will be evident within the sternum, vertebral bodies, ribs, sacrum, and either or both innominate bones and long bones. This is the result of the reticuloendothelial cells of the bone marrow handling the colloid which the liver and spleen were incapable of phagocytizing. It should be noted that Tc-99m sulfur colloid will appear in these areas in a normal pa-



tient if sufficient tracer is given. Indeed this characteristic of Tc-99m sulfur colloid has been used to identify the areas of the reticuloendothelial system throughout the body in patients with hematological disorders.

Figure 3 is a posterior hepatic scan image of a patient with severe cirrhosis. Technetium 99m sulfur colloid was the tracer employed. Note the reduced tracer activity within the enlarged liver when compared with the markedly increased tracer activity within the enlarged spleen. Tracer activity is also prominent within the vertebral bodies, sacrum, and iliac wings.

Special Procedures and Their Interpretation

A relative decrease in tracer activity between the right and left lobes of the liver can often be an interpretative problem when Au-198 colloid gold or Tc-99m sulfur colloid is the tracer used. This decreased tracer activity at the porta hepatis may represent (1) normal thinning between the liver lobes, (2) a space-occupying lesion or lesions, or (3) dilated hepatic biliary radicals secondary to extrahepatic ductal obstruction.

In this problem, an I-131 labeled rose bengal hepatic scan may be of assistance.

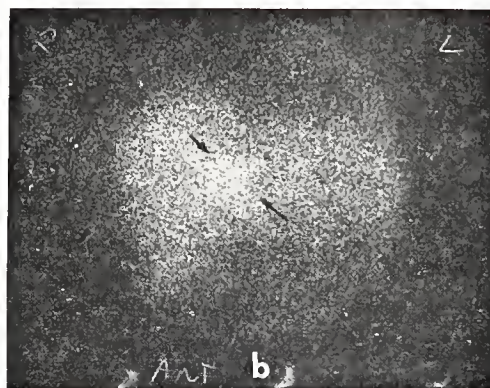


Figure 4

Fig. 4. A. Anterior liver scintiphoto using Tc-99m sulfur colloid as the tracer. Note the absence of tracer at the porta hepatis.

B. Anterior liver scintiphoto using I-131 labeled rose bengal as the tracer. Note the increased tracer activity at the porta hepatis.

C. Liver scintiphoto made about three hours after 4-B. Note activity at the porta hepatis and gallbladder, indicative of common bile duct obstruction.

Hepatic or common bile duct obstruction can produce dilation of the hepatic radicals owing to the build-up of bile in the biliary radicals. Since I-131 labeled rose bengal is excreted into the biliary tract, it may collect within the hepatic biliary radicals and be unable to pass into the duodenum. This may be represented as an area of increased tracer activity in the porta hepatis and correspond to the area of decreased activity on the initial hepatic scan. Another interpretative factor is the presence or absence of tracer activity within the intestine. In the normal liver and biliary tract, I-131 labeled rose bengal can be demonstrated in the area of the intestine 20 to 30 minutes after injection. In severe liver disease or extrahepatic obstruction the tracer may not pass into the intestine. It will subsequently be excreted through the kidneys. This activity within the kidneys should not be confused with intestinal tracer activity.

Figure 4 illustrates radionuclide liver studies performed on a jaundiced patient with suspected malignant disease. The liver studies were performed with the Anger scintillation camera. In the initial study, Tc-99m sulfur colloid was used as the tracer. Figure 4a is the anterior projection from this study.

Note the decreased tracer activity between the right and left lobes of the liver. The question arose as to whether this represented a neoplasm or dilated biliary radicals at the porta hepatis. An I-131 labeled rose bengal liver study was performed. Figure 4B illustrates an anterior projection made about four hours after injection. Note the increased activity in the area of the porta hepatis. Figure 4C was obtained three hours later and demonstrates further increased activity in the porta hepatis and tracer activity in the gallbladder. These studies demonstrate common bile duct obstruction. At surgery a carcinoma of the pancreas was identified and obstruction of the common bile duct was found.

In suspected neonatal biliary atresia, the measurement of urine-free stool for I-131 following the injection of I-131 labeled rose bengal has proved to be of diagnostic value.⁷ Serial scanning of the abdomen may also be helpful.

Subdiaphragmatic abscesses can be a difficult diagnostic problem to the clinician. A liver scan can assist in excluding intrahepatic abscesses. We recommend a combination liver-lung scan in order to rule out subphrenic abscess. Initially, a routine liver scan is obtained and then the appropriate dose of I-131 labeled macroaggregated human serum albumin is administered intravenously. The lower lung fields and liver are scanned in at least the anterior and right lateral projections, using a spectrometer "window" setting which encompasses both radionuclide major photopeak energies. In the normal patient, the lung and liver tracer activity should be adjacent to each other. In a subphrenic abscess there may be a space relatively devoid of tracer activity between the liver dome and the lung base. One should also observe the lateral border of the liver tracer activity for edial displacement in relation of the lateral abdominal wall. This appearance may be seen in patients with abscess or ascites. The presence of a basilar pulmonary density or a subpulmonary loculated effusion will negate the value of this study.

Figure 5 illustrates a normal liver-lung

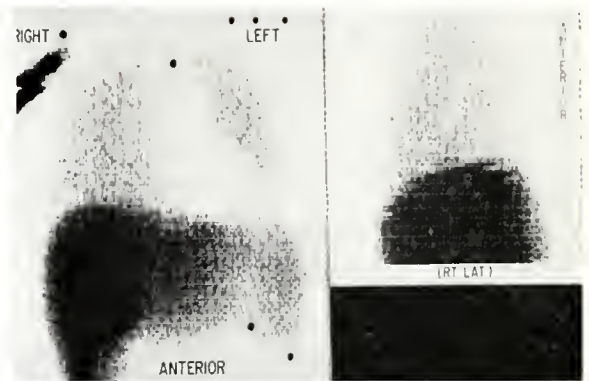


Fig. 5. Anterior and right lateral scans illustrating a normal combined liver-lung study.

scan. Technetium-99m sulfur colloid was the hepatic tracer, and I-131 labeled macroaggregated human serum albumin was the pulmonary tracer. There is no evidence of a subphrenic abscess. The Z-shaped tracer activity in the right hand corner of the anterior scan represents I-131 MAAHSA which has "coated" a thrombus that had formed distal to a venous catheter.

Discussion

While the initial enthusiasm for liver scanning as a definitive diagnostic tool has been tempered with experience, it continues to be an important and safe means of uncovering liver pathology. The overall interpretative accuracy for liver scanning has been reported to range between 68% in a series by Nagler and colleagues⁸ using I-131 labeled rose bengal, to 90% by Shingleton and associates⁹ and Ferrante and Maxfield,¹⁰ using primarily Au-198 colloidal gold as the tracer. Metastatic lesions have had better than 80% successful interpretation in several series.^{2,10,11}

A detailed comparative study was reported by Ferrante and Maxfield.¹⁰ They reviewed 100 patients with known liver disease established by biopsy, surgery, or autopsy. All 100 patients had hepatic scans and various liver function studies. Half of the patients underwent percutaneous hepatic needle biopsy, with positive results in 92% of the 50 cases. Liver scanning was positive for the presence of hepatic disease in 90% of the 100 patients studied, but interpretations were only 71% correct in establishing the specific

hepatic disease. Needle biopsy was no better than hepatic scanning in defining metastatic lesions, but superior in diffuse hepatic disease. They found the hepatic scan to be the most accurate diagnostic test in large hepatic space-occupying lesions. When a battery of liver function tests were performed, the results were comparable in accuracy to those of biopsy and thus somewhat more accurate than hepatic scanning. In this series and that of Gollin and associates,¹² the hepatic scan was more accurate than individual bromsulphalein or serum glutamic oxalacetic transaminase studies, but similar to the alkaline phosphatase test in detecting space-occupying lesions. Gollin and associates¹² and Smith and Williams¹³ reported the highest error in liver function studies to occur as false positive results. In the Smith and Williams series,¹³ elevated alkaline phosphatase and BSP values were found in 40% and 26.6% of the patients who were found to have normal livers at surgery or by biopsy. This is in contrast to their 13.5% false-positive hepatic scans. Ferrante and Maxfield,¹⁶ on the other hand, found the greatest error in liver function studies to occur as false negatives. They attribute this difference to the excellent quality control of their clinical laboratory. In metastatic disease, false-negative results were seven times as frequent in alkaline phosphatase studies and six times as frequent in BSP studies as in hepatic scanning. These investigators reported that, overall, the false negatives comprised 5% and the false positives 5% of the scan results in their series. Smith and Williams¹³ reported overall, 9.1% false negative scans and, as noted earlier, 13.5% false positive scans.

In general, the number of false-positive scans for space-occupying lesions has ranged between 10% and 22%. These figures are attributable to the difficulty encountered in interpreting neoplasm from "focal areas" of diffuse parenchymal disease such as cirrhosis.³ Our own data are comparable to those of other reported large series.

There have been few studies comparing celiac arteriography and liver scanning. Rodrigues-Antunez and Alfidi^{14,15} reported

a series of approximately 60 cases in which both celiac arteriography and liver scanning were performed. Although there was a slightly greater incidence of false positive liver scans, these investigators indicated that liver scanning was more accurate than celiac arteriography in establishing the presence of liver disease.

Dux and colleagues¹⁶ reported that in their series the hepatic arteriogram and splenoportogram revealed more information than did liver scans. Kreel and associates¹⁷ concluded that liver scans and arteriography are complementary rather than competitive, and both should be used in determining the presence of a pathological condition.

Hepatic imaging is not solely of value in the initial diagnosis of liver disease and subphrenic abscesses. It can help guide the physician in performing a percutaneous hepatic needle biopsy. It may also be used to follow the course of patients receiving chemotherapy for hepatic neoplasms, and patients in whom a hepatectomy has been performed. It will probably be useful in following patients who have received hepatic transplants, as suggested by investigators at the University of Colorado.

Summary

Hepatic radionuclide imaging may be performed with a rectilinear scanning or stationary imaging device. Several radiopharmaceuticals are available and have been briefly discussed. Routine and special liver imaging procedures are described. The method is of greatest value in the identification of space-occupying lesions, and it can be of considerable assistance in certain clinical situations involving diffuse hepatic parenchymal disease. In the face of normal or equivocal laboratory studies, the hepatic "scan" can be a factor in determining the advisability of further studies.

So long as the limitations of radio-nuclide hepatic imaging are appreciated, and it is used "in conjunction with" rather than as a "substitute for" other hepatic studies, it should continue to be a valuable diagnostic adjunct in the evaluation of liver disease.

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Coronary Artery Aneurysm

Report of a Case

TAKEY CRIST, M.D.,* AND NAIYER HABIB, M.D.**

Coronary artery aneurysm has become a subject of interest for study because of its rarity and disputed causation and its failure to produce typical symptoms. Although others deny the rarity of this lesion,¹ it would appear that because it is infrequently encountered and rarely diagnosed clinically, any new case adds additional information to the literature.

Case Report

A 65-year-old white male was admitted to the emergency room with a history of having been forced to go to bed because of chest discomfort, only to awake with substernal pain followed by increasing dyspnea, sweating, and weakness. When he entered the emergency room two hours later, he was in a critical condition. He appeared pale and apprehensive, and had marked dyspnea. His neck veins were distended, he was perspiring profusely, and his blood pressure was 150 systolic, 100 diastolic. Heart sounds were

distant and there were occasional extrasystoles. The chest and lungs showed signs of pulmonary emphysema and rapidly developing pulmonary edema. The peripheral arteries were moderately sclerotic.

An electrocardiogram indicated anterior myocardial infarction. His blood pressure began to fall. He was nauseated and started gagging. Almost immediately all cardiac and respiratory activity ceased. He was given digitalis and diuretics, and was placed on a regimen of intravenous fluids and nasal oxygen. Ultimately cardiac resuscitation was unsuccessful.

Pathology

On autopsy his heart weighed 360 gm. The pericardial sac contained 25 ml of blood-tinged fluid. The pericardial and epicardial surfaces appeared normal. There was a fusiform aneurysm of the right coronary artery, beginning at a point about 2 cm distal to the orifice. The aneurysm measured 7 cm long, with the greatest diameter of 1.5 cm in the proximal half and a diameter of 1.0 cm in the distal half. Gross cut showed calcium

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deposits in the wall of the dilated artery. The aneurysm was filled with old thrombosed material, through the center of which was a channel about equal in size to that of normal coronary artery. Towards the distal end of the aneurysm there appeared to be some fresh thrombosed material in the channel, but the lumen did not appear to be completely occluded. The other portions of the right coronary artery showed arteriosclerotic changes with calcium deposits and some reduction in the size of the lumen distal to the aneurysm. The first portion of the left coronary artery was extremely calcified; its descending branch showed arteriosclerotic changes and was smaller than normal. The circumflex branch of the left coronary artery was also sclerotic and smaller than normal. Two old infarcts were present, but there was no evidence of fresh infarction.

Microscopic examination revealed marked sclerosis and calcification of coronary arteries. The wall of the right coronary artery showed numerous deposits of lipid material and calcium, with moderate lymphocytic infiltration of the outer wall and lumen containing old thrombotic material. The left coronary artery showed extreme sclerosis, and its descending branch was smaller. The aorta evidenced extreme atherosclerosis associated with an aneurysm of the right common iliac artery. There was a small saccular aneurysm of the left middle cerebral artery. An area of encephalomalacia was apparent in the upper anterior part of the left internal capsule. Both lungs showed congestion and edema. The liver showed slight passive congestion.

Discussion

It is generally believed that Bougon² in 1812 was the first to describe an aneurysm of a coronary artery. Bertelsen and Lindahl,³ however, claim that in 1761 Morgagni⁴ had already reported a patient.

In 1929 Packard and Wechsler⁵ attempted the first extensive review of the literature and added one case of their own. Reports appeared sporadically, but the subject was not reviewed again until Scott's compilation⁶ in 1948. Daoud and others⁷ reported 10 cases and reviewed the literature in 1963.

In view of the lack of typical symptoms or signs relating to coronary artery aneurysm, it is usually not diagnosed before autopsy. Discovery before death is made incidentally by roentgenograms of the chest when these arteries are calcified. Lenk⁸ demonstrated calcified coronary arteries in the living by using the Potter Bucky diaphragm, and so did Wosika and Sosman.⁹ Munker and others¹⁰ were the first to establish the diagnosis by roentgenography. Most recently Ellis and Kurth¹¹ reported an aneurysm of a calcified coronary artery detected in a young Filipino woman in the conventional roentgenogram of the chest.

Coronary artery aneurysms may be single or multiple, and they have been found to be frequently associated with abdominal aortic aneurysm. Daoud and others⁷ report that 8 out of 10 patients having coronary artery aneurysm died of ruptured abdominal aortic aneurysm, and 30 out of 109 patients had multiple aneurysms of the right coronary artery, associated with aneurysmal dilatation of the left iliac artery. The patient died of ruptured abdominal aortic aneurysm. In Scott's series,⁶ the majority of the aneurysms involved the left coronary artery. In the same series 36 patients had a single aneurysm and 8 had multiple aneurysms. Daoud⁷ reports that, statistically, the anatomic distribution of aneurysms of the coronary artery reveals almost equal frequency between the left coronary artery and its major branches, and the right coronary artery.

The etiology of coronary aneurysm remains unknown. Most discussions of its pathogenesis usually include factors which can be divided into congenital and acquired types. The most common cause of the acquired type is atherosclerosis. Other causes include acute endarteritis in consequence of metastatic spread, acute periarteritis, periarteritis nodosa, and syphilitic or rheumatic arteritis. Most recently Gore and others¹⁸ have reviewed congenital aneurysm of the coronary arteries and reported a case. Scott⁶ classified coronary artery aneurysms as diffuse and localized. According to Harris,¹³ Forbus,¹⁴ Rigdon and Vandergriff,¹⁵ the dif-

fuse is of congenital origin and develops in association with a defect in the elastic lamella and muscular coat either at a branch or bifurcation similar to the changes noted in congenital aneurysm of cerebral arteries. Bertelsen and Lindahl¹² reported one case of coronary artery aneurysm from periarteritis nodosa in an eight year old girl and another case of atherosclerotic origin in a man aged 81 years. Meyer¹⁶ described the picture of periarteritis nodosa in the coronary arteries. Tellem and Rubenstone¹⁷ reported localized aneurysms of the left main coronary artery of atherosclerotic origin.

Daoud⁷ was impressed by the frequent association of aneurysms of the coronary arteries with aneurysm of the abdominal aorta. It is of interest that in our patient, the aneurysm of the right coronary artery was associated with hypoplasia of the left coronary artery, an aneurysm of the right common iliac artery, and a saccular aneurysm of the left middle cerebral artery. The severe atherosclerotic changes in the coronary arteries suggest atherosclerosis as the cause. The hypoplasia of the left coronary artery appears to be congenital, with secondary atherosclerotic changes. Could it be that the aneurysm of the right coronary artery in this case was of congenital origin and later complicated with atherosclerosis?

Summary

A patient with an aneurysm of right coronary artery associated with hypoplasia of the left coronary artery, an aneurysm of the left iliac, and a saccular aneurysm of the middle cerebral artery is presented.

Acknowledgements

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Anesthesia for Tonsillectomy and Adenoidectomy

ALBERT R. HOWARD, M.D.

The basis of this discussion is more than 1,200 adenoidectomies and or tonsillectomies performed on patients ranging in age from 7 months to 56 years. We have been pleased with the speed and ease of induction of anesthesia, excellent exposure for surgeons, and rapid emergence with few side effects. Nausea and vomiting are practically non-existent (any excessive swallowing of blood is usually relieved early in the recovery phase). Pain is relieved by oral non-narcotic analgesics in most children and some adults; however, narcotics are not withheld if required.

Occasional hypoventilation after extubation has been observed. As a rule this condition clears after two or three minutes of observation, with assisted respiration. There has been neither prolonged apnea nor considerable hypoventilation. One instance of unexplained gross hematuria in an 8-year-old girl occurred on the evening following operation. However, this sign had disappeared by the next morning and subsequent renal evaluation has disclosed no abnormality.

Technique

Patients are seen the evening before for preanesthetic evaluation, and an effort is made to establish rapport. With patients above the age of 3 years an attempt is made to explain what will happen from the time of the preoperative medication until he returns to his room. In the appropriate age and apprehension groups, an intravenous injection is referred to as a "pinch" and an actual pinch is made at the antecubital fossa as this is being discussed.

Bedtime medications consist of chloral hydrate in the pediatric age groups and short-acting barbiturates in older patients. One hour before operation Demerol is given in doses of approximately 5 mg per year

of age or 0.5 mg per pound of body weight, together with appropriate dosages of atropine. These dosages are suitable up to about the ages of 8-10 years, beyond which from 50 to 100 mg are given, depending upon individual factors.

In surgery a precordial stethoscope, a blood pressure cuff or both are affixed for monitoring. In patients under 2½ years or thereabouts, gas induction is accomplished with nitrous oxide and halothane, and succinylcholine is given intramuscularly in dosages of about 1 mg per pound of body weight to accomplish intubation. Maintenance of anesthesia is essentially the same as in the older age groups.

In patients with accessible veins, induction is achieved with a mixture of 12 mg of methorexital (Brevital) and 0.5 mg of the relaxant decamethonium (Syncurine), per cubic centimeter; sterile water is used as a diluent for injection. The total estimated dose is given at a moderately rapid rate and the needle is removed. The dose varies from 1.5 to 5 cc in the 2½ to 8 year old age group. Ten cubic centimeters is considered an average dose for a robust adult, age and physical makeup being modifying factors.

The patient loses consciousness immediately and for ventilation is given a mixture of 3 liters of nitrous oxide and 2 liters of oxygen per minute, carrying 1.0 to 1.5 percent halothane for the two to three minutes required to relax the jaw adequately.

For intubation in children a clear plastic tube, uncuffed, but of a size to prevent leakage, is used. In adults a cuffed Murphy tube is used. A few ventilations are given after intubation followed by insertion of a Crowe-Davis gag. This carries a tongue blade which has been modified with a slot to hold but prevent crimping of the endotracheal tube. Special care is taken to keep the tube in the midline. The operating table is adjusted to a slight Trendelenburg position, and the gag-blade combination is hooked over the rim of a Mayo stand in more or less standard fash-

Read before the Section on Anesthesia, Pinchurst, May 13, 1968.

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ion. The rebreathing tubes are placed so as to lie on the Mayo stand and thus produce less problem from kinking, and so forth. Exposure is excellent, the airway positive, and hands are available for ventilation, which is exaggerated during the procedure, for record-keeping and other needed functions. For maintenance, gas flows are changed to 2:2 and the amount of halothane usually reduced.

Postoperative Effects

At the end of the operation the gag is removed, the flow of halothane and nitrous oxide turned off, and the patient hyperventilated for a few breaths with oxygen. The

tube is then removed and the patient ventilated by mask until adequate spontaneous respiration returns, usually only momentarily. The patient is transferred to the recovery room with returning reflexes and, as the general rule, is reactive to pain on arrival there.

Postoperative bleeding has been minimal, probably because of the adequate hemostasis (by cautery or ligature) afforded by better exposure and absence of airway problems. Other postoperative complications have been insignificant as well. Random electrocardiographic monitoring during the procedure has demonstrated no significant disturbance of rhythm and rate.

CORRECTION

In the May issue of the JOURNAL an erroneous asterisk appeared in Table 3, page 177, of the article, "A Manual of Clinical Conception."

Table 3 was entitled "Relative Potency of Progesterone and Progestational Agents Using the Induction of Withdrawal Bleeding as an Index." The asterisk in error appeared before the sixth agent from the top, *norethindrone acetate*, and referred to the footnote, "Not available commercially except in the contraceptive regimen."

Norethindrone acetate is marketed, of course, by Parke Davis and Company under the trade name *Norlutate*, for use as a progestational agent.

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Wingate Memory Johnson, M.D.
Founding Editor (1949-1953)

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AUGUST, 1969

THE A.M.A. ANNUAL CONVENTION

The first meeting of the House of Delegates opened with patriotic pageantry featuring a Marine Drum and Bugle Corps in a historic review of the evolution of the American flag. The finely disciplined dignity of this performance was precipitously followed by a well-organized cortege of some 200 dissidents led by one Richard Kunnes, M.D., a non-A.M.A. member, in a garrulous demonstration of rancor and invective lasting some 25 minutes. As marines bearing the colors marched away from the rostrum toward the exits to the tune of the National Anthem,

some of the young demonstrators were heard to hiss and observed to spit in the direction of the flags while others lay on the floor. It was obvious that press and camera coverage had been prearranged for an episode that added "not a whit" to constructive deliberation upon the 137 resolutions and 59 reports of boards and committees requiring action, after open hearings and study by nine reference committees.

Only a few high lights of House action can be noted here. In an effort to unify the profession and improve scientific programs, the House adopted an ad hoc committee report providing for medical specialty society participation in the selection of delegates from medical sections to the A.M.A. House and other section officers. This parallels a project being pursued in the North Carolina State Society to involve specialty groups in scientific programs of the annual meeting.

In connection with the adoption of a management survey report the House approved a list of subjects "to which highest priorities should be assigned."

1. The rising cost of medical care
2. The expansion of out-of-hospital health services
3. Development of community health centers
4. Experimentation and innovation on new methods of delivery of health services
5. Medical audit, utilization and review committees
6. Medical manpower needs
7. Preventive medicine
8. Family planning.

Many "meeting-ridden" doctors will look with approval upon a proposed revision of regulations of the Joint Commission on Accreditation of Hospitals reported to a reference committee allowing joint meetings of two or more overlapping hospital staffs and a county society, in a logical geographic area, provided minutes of the meetings show pertinent items related to each hospital and recorded departmental meetings are held in each hospital.

Recognition was accorded North Carolina through a memorial resolution honoring the late Millard D. Hill, formerly Vice-President

of the A.M.A. At the inaugural ceremony for the new President of the A.M.A., Gerald D. Dorman, three North Carolinians graced the rostrum: John R. Kernodle, member of the Board of Trustees; Edgar T. Beddingfield, Jr., President of Medical Society of the State of North Carolina, and Robert A. Ross, president of the American College of Obstetrics and Gynecology. In addition, Frank W. Jones was appointed to a reference committee.

Summaries of other events of the Annual Convention may be gleaned from the recent current issues of the A.M.A. News.

J.S.R.

* * *

THE LEGISLATURE TREATS THE MEDICAL SCHOOLS WELL

The recently adjourned legislature wound up doing well by the medical schools of the state, real and nascent. The University of North Carolina at Chapel Hill got the money it asked for; buildings, salaries, salary increases, and new programs in community medicine and family medicine were all present and accounted for when funds were dispensed. In a more radical departure, Duke and Bowman Gray will be given an allowance for each newly enrolled freshman who is a citizen of North Carolina, to be applied to the freshman class of this fall, and next year to the freshman and sophomore classes. There is no automatic renewal provision, and the 1971 legislature will have to consider any proposal for extension of the allowance. The legislative action which provides the money encourages an increase in enrolled North Carolinians and in strengthening the teaching of community medicine. How the State Board of Higher Education, which administers the funds, will interpret these encouragements remains to be seen. Final action in the legislature reduced the requested tuition grant to the students from \$1000 to \$250 per year, bringing it in line with the program supported by the state at Meharry Medical College since 1947.

East Carolina University has been given funds for the planning of a two-year curriculum in medicine. The aim is to develop a facility which will result in attracting more

doctors to the eastern part of the state, a controversial matter which has been prominently dealt with in the public press.

The Society was very active in promoting the matter of funds for the existing schools. No official position was taken regarding the East Carolina proposal. President Jenkins seems quite able to provide the turpentine for his own proposals.

* * *

COTTAGE CHEESE

Perhaps there are more connoisseurs of cottage cheese within the profession than one might suspect from a small sampling, to whom it came as a surprise that three kinds, of differing caloric value and composition, are available. For the benefit of the ignorant, in this calorie-conscious time, some background material might be interesting.

When Little Miss Muffet sat on her tuffet, the "curds" she ate were cottage cheese, as physicians should already know. Skim milk is used in making this fresh cheese, being altered by heat, lactic acid, and rennet activity. The cheese thus made is called "dry" cottage cheese by the dairy industry; it is not sold in the stores. "Baker's" cheese is unwashed cottage cheese curds. Like all types of cottage cheese it is almost pure protein, with only 1.1% fat and 23 calories per ounce. Most of the protein in 3 quarts of skim milk is needed to make a pound of the cheese. Traditionally, the big seller in cottage cheese has been the creamed type, so-called because the dry washed curds are moistened with cream; it has 4.0% fat and a caloric value of 30 calories per ounce. More recently introduced, and already popular, is "diet" cottage cheese, in which the moistener is analogous to skim milk; it has 1.2% fat and 25 calories per ounce. Like a lot of nutrition data, different figures for fat and caloric content are available from different sources. Those quoted come from the laboratory of a local dairy and are based on their standards. With the small gap between creamed and diet cottage cheese in fat content and caloric value there is little choice between them except in the matter of flavor, or in situations where a low fat diet

has been prescribed.

Whether one is eating ricotta in an Italian cuisine, "pot cheese" in the north, Dutch cheese in France or cottage cheese in North Carolina, the product has a common origin and has been around a long time. Its stock is about to rise even more now that fat is regarded as so menacing, both in the diet and around the midriff.

CORRESPONDENCE

Carotid Artery Tumor

To the Editor:

An 18-year-old white youth who had been in apparently good health previously was seen on July 24, 1965, complaining of poisoning about the neck. At this time a small rubbery, questionably fluctuant mass was felt in the neck. On being questioned, the patient stated that this mass had been present for about 1½ years, but since it had produced no symptoms he had not been concerned about it. A tentative diagnosis of a branchial cleft cyst was made.

On July 28, 1965 he was admitted to the Swain County Hospital in Bryson City for excision of the tumor. On admission the blood pressure was 116/60, the pulse 72, and the temperature 98.6 F. The physical examination otherwise was essentially negative except for acne on his face and neck and a rubbery tumor of the neck, the size of a hickory nut, just beneath the angle of the right jaw. Urinalyses and blood count were normal.

On the morning of July 29, 1965, with the patient under general anesthesia with tracheal intubation, an incision approximately 2 inches long was made in one of the creases in the skin of the neck overlying the mass. When the presenting portion of the mass was exposed it was found to be deep red and rubbery and to bleed profusely on touch or instrumentation. With further exploration the tumor was found to be surrounding the bifurcation of the carotid artery, and completely encasing the upper common, lower

external, and lower internal carotids. The upper extremities of the tumor extended to the base of the skull, where the internal carotid artery disappeared into the skull. The extension up the external carotid measured approximately 2 cm. The incision was enlarged and the common carotid was mobilized and elevated with umbilical tape. By careful dissection the tumor was freed from the superficial surfaces of the internal and external carotid arteries. The arteries were then pulled anteriorly, and by careful dissection the tumor was separated from the posterior surfaces of the arteries. In the dissection, the adventitia of the arteries was actually removed with the tumor. At one point a small rent approximately 2 mm in length was made into the common carotid artery and this was closed without incident with 5-0 black silk suture. Dissection proceeded well, and without further incident the tumor was completely removed and the skin closed.

The pathology report from the North Carolina Baptist Hospital was "carotid body tumor."

The patient's temperature was 102.8 F 12 hours after operation, but by the end of the second postoperative day he was afebrile. The only postoperative complaint was a rather severe "sore throat" the morning following surgery. He was expectorating a moderate amount of foamy white nonpurulent sputum. The blood pressure remained stable in the neighborhood of 120 systolic, 60 diastolic. The patient was up and about on his second postoperative day, feeling well, and was discharged on his fourth postoperative day. At no time did he have any symptoms referable to cerebrovascular insufficiency of the right side of the brain.

The patient was last seen on May 4, 1968, at which time his scar was well healed, pulsation in the right carotid artery was good, and there was no evidence of recurring tumor.

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Monthly Perinatal Mortality Report

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹: NORTH CAROLINA,
MAY 1969 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE					NONWHITE					COUNTY	WHITE					NONWHITE				
	Perinatal Deaths		Total Deliveries June 1968 - May 1969	Perinatal Rate Per 1,000 Deliveries		Perinatal Deaths		Total Deliveries June 1968 - May 1969	Perinatal Rate Per 1,000 Deliveries			Perinatal Deaths		Total Deliveries June 1968 - May 1969	Perinatal Rate Per 1,000 Deliveries		Perinatal Deaths		Total Deliveries June 1968 - May 1969	Perinatal Rate Per 1,000 Deliveries	
	May 1969	June 1968 - May 1969				May 1969	June 1968 - May 1969					May 1969	June 1968 - May 1969				May 1969	June 1968 - May 1969			
NORTH CAROLINA	144	1927	67097	28.7		102	1384	27594	50.1												
ALAMANCE	4	41	1277	32.1		7	25	434	67.6		PENDER	7	129	24.3			4	146			
ALEXANDER	12	294	90.8			3	43				PERQUIMANS	1	57				2	52			
ALLEGHANY	1	5	123	40.7				3			PERSON	8	249	30.7			11	186	59.7		
ANSON	2	7	146	47.9		2	15	269	55.9		PITT	2	18	713	25.1		4	27	611		
ASHE	1	14	296	47.3		1	3				POLK	5	139	26.0			1	4	32		
AVERY			226	31.1				5			RANDOLPH	4	27	1209	22.3			7	157		
BEAUFORT	1	12	410	29.2			14	225	62.1		RICHMOND	1	16	477	23.8			1	16		
BERTIE	1	2	115			1	10	260	38.8		ROBESON	3	18	609	29.6			3	58		
BLADEN	7	253	37.7				12	203	69.1		ROCKINGHAM	6	33	1005	32.8			1	26		
BRUNSWICK	5	286	17.8				5	151	33.1		ROWAN	2	29	1136	26.1			16	318		
BUNCOMBE	8	72	2122	33.9		8	273	29.3			RUTHERFORD	1	25	717	34.8			9	135		
BURKE	5	32	1004	31.9			5	86			SAMPSON	14	371	37.7			3	24			
CABARRUS	2	30	1064	28.1		1	12	282	42.6		SCOTLAND	2	11	307	35.8			1	13		
CALDWELL	3	37	1107	33.9		4	93				STANLY	2	27	639	42.3			9	141		
CAMDEN	1	54				1	30				STOKES	11	330	32.3							
CARTERET	3	12	522	23.1		4	81				SURRY	4	30	903	33.2			6	65		
CASWELL	7	159	44.1			9	173	35.0			SWAIN	2	2	94				1	52		
CATAWBA	37	1492	19.8			2	11	230	47.8		TRANSYLVANIA	2	12	327	36.7			1	18		
CHATHAM	6	330	18.1			8	180	44.4			TYRRELL	1	30					3	29		
CHEROKEE	5	322	15.6			2	13				UNION	3	27	681	29.0			1	9		
CHOWAN	1	91				5	91				VANCE	13	296	43.9			1	18			
CLAY	1	4	90					1			WAKE	3	75	3012	24.8			4	65		
CLEVELAND	1	29	950	30.4		3	22	432	50.9		WARREN	1	73					6	167		
COLUMBUS	1	12	567	21.0		14	354	38.6			WASHINGTON	1	4	119				7	162		
CRAVEN	3	30	1225	24.5		3	24	371	63.7		WATAUGA	1	15	366	41.0				3		
CUMBERLAND	9	117	3661	22.0		7	68	1297	52.4		WAYNE	1	23	1102	20.8			2	33		
CURRITUCK			56			2	32				WILKES	2	20	768	26.0				2		
DARE	7	2	110					9			WILSON	3	13	569	22.8			1	29		
DAVIDSON	7	44	1481	29.7		1	11	237	46.4		YADKIN	1	15	366	41.0			1	2		
DAVIE	1	11	268	41.0		6	62				YANCEY	1	203					1	4		
DOUGLAS	1	9	379	23.7		1	13	285	45.6		CITIES										
DURHAM	2	34	1464	23.2		4	32	880	36.4		City totals are also included in county totals										
EDGECOMBE	12	474	20.9			25	506	49.1		ALBEMARLE	1	7	178	33.7			2	51			
FORSYTH	3	69	2747	19.1		8	72	1147	65.8		ASHEVILLE	1	27	759	35.6			7	238		
FRANKLIN	4	179				3	14	239	65.6		BURLINGTON	1	17	548	31.0			2	7		
GASTON	6	75	2466	30.4		3	18	486	37.2		CHAPEL HILL	7	302	33.1			1	5			
GATES			37			1	7	102	68.6		CHARLOTTE	2	68	3166	21.5			5	74		
GRAHAM	3	98						11			CONCORD	1	8	222	36.0			1	6		
GRANVILLE	10	229	44.1			1	33	375	69.0		DURHAM	1	20	963	20.4			4	29		
GREENE	1	2	88			1	8	135	59.2		EOEN	2	7	256	27.3			1	5		
GUILFORD	2	115	3720	30.9		7	91	1586	57.4		ELIZABETH CITY	1	5	158	21.6			5	86		
HALIFAX	5	371	13.6			1	26	599	43.4		FAYETTEVILLE	4	39	1024	38.1			2	28		
HARNETT	3	22	576	38.1		1	14	323	43.0		GASTONIA	26	802	30.4			1	8			
HAYWOOD	1	26	712	36.5		1	3	25			GOLOSBOBO	5	332	15.1			1	14			
HENDERSON	2	25	697	35.8		1	40				GREENSBORO	46	1756	20.1			3	47			
HERTFORD	3	3	132			2	20	246	31.3		GREENVILLE	1	10	311	32.1			2	9		
HOKE	1	5	113	44.2		10	216	46.3			HENDERSON	7	128	64.7			7	165			
HYDE			41			2	49				HICKORY	1	6	371	16.0			1	9		
IREDELL	2	29	933	31.1		2	22	318	59.1		HIGH POINT	1	24	805	29.8			30	448		
JACKSON	6	253	25.7					46			JACKSONVILLE	1	13	437	28.7			2	55		
JOHNSTON	2	24	756	31.7		12	323	37.1			KINSTON	2	256					17	212		
JONES	1	71				3	80				LENOIR	5	175	28.8			2	43			
LEE	1	7	397	17.6		1	8	145	48.0		LEXINGTON	2	7	292	24.0			3	71		
LENOIR	14	572	29.0			1	26	428	60.7		LUMBERTON	1	6	238	26.0			1	12		
LINCOLN	2	24	520	46.1		5	96				MONROE	1	6	146	41.1			3	88		
MCDOWELL	4	20	530	37.7				38			NEW BERN	4	174					1	9		
MACON	1	6	197	30.6				5			RALEIGH	1	42	1517	27.0			4	44		
MADISON	7	232	30.1					3			REIDSVILLE	6	150	41.0			3	89			
MARTIN	2	11	209	52.6		16	269	59.8			ROANOKE RAPIDS	4	181						41		
MECKLENBURG	3	97	4784	20.3		5	84	2129	39.2		ROCKY MOUNT E		127					12	152		
MITCHELL	1	6	217	27.7				3			ROCKY MOUNT N	2	217					9	96		
MONTGOMERY	1	3	241			3	114				SALISBURY	7	227	31.8			6	123			
MOORE	1	17	524	32.4		7	231	30.3			SANFORD	1	5	174	39.7			1	2		
NASH	11	538	21.9			26	505	51.0			SHELBY	1	7	219	21.0			1	7		
NEW HANOVER	1	38	1089	34.9		2	12	409	28.6		STATESVILLE	2	9	255	35.3			9	142		
NORTHAMPTON			88			2	19	269	70.6		THOMASVILLE	2	8	187	45.9			1	5		
ONSLOW	6	52	2116	24.6		1	18	432	41.7		WILMINGTON	1	21	564	27.1			10	347		
ORANGE	25	852	19.2			2	10	228	48.8		WILSON	1	6	295	20.3			16	298		
PASQUICO	2	1	92			2	61				WINSTON SALEM	1	27	1520	29.6			6	69		
PASQUOTANK	1	6	274	21.9		12	167	71.8													

¹Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

COMMITTEES & ORGANIZATIONS
BOARD OF MEDICAL EXAMINERS
OF THE STATE OF NORTH CAROLINA
MEDICAL PRACTICE ACT

Article 1 of Chapter 90 of the General Statutes of
North Carolina

With Amendments through 1969

Art. 1. Practice of Medicine.

§ 90-1. **North Carolina medical society incorporated.**—The association of regularly graduated physicians, calling themselves the state medical society, is hereby declared to be a body politic and corporate, to be known and distinguished by the name of The Medical Society of the State of North Carolina. (Rev., s. 4491; Code, s. 3121; 1858-9, c. 258, s. 1; C. S. 6605.)

§ 90-2. **Board of examiners.**—In order to properly regulate the practice of medicine and surgery, there shall be established a board of regularly graduated physicians, to be known by the title of The Board of Medical Examiners of the State of North Carolina, which shall consist of seven regularly graduated physicians. (Rev., s. 4492; Code, s. 3123; 1858-9, c. 258, ss. 3, 4; Ex. Sess. 1921, c. 44, s. 1; C. S. 6606.)

§ 90-3. **Medical society appoints board.**—The Medical Society shall have power to appoint the Board Of Medical Examiners. (Rev., s. 4493; Code, s. 3126; 1858-9, c. 258, s. 9; C. S. 6607.)

§ 90-4. **Board elects officers and fills vacancies.**—The Board of Medical Examiners is authorized to elect all such officers and to frame all such by-laws as may be necessary, and in the event of any vacancy by death, resignation, or otherwise, of any member of said board, the board, or a quorum thereof, is empowered to fill such vacancy. (Rev., s. 4494; Code, s. 3128; 1858-9, c. 258, s. 11; C. S. 6608.)

§ 90-5. **Meetings of board.**—The Board of Medical Examiners may assemble once in every year in the city of Raleigh, and shall remain in session from day to day until all applicants who may present themselves for examination within the first two days of this meeting have been examined and disposed of; other meetings in each year may be held at some suitable point in the state if deemed advisable. (Rev., s. 4495; 1915, c. 220; s. 1; 1935, c. 363; C. S. 6609.)

§ 90-6. **Regulations governing applicants for license, examinations, etc.**—The Board of Medical Examiners is empowered to prescribe such regulations as it may deem proper, governing applicants for license, admission to examinations, the conduct of applicants during examinations, and the conduct of examinations proper. (1921, c. 47, s. 5; Ex. Sess. 1921, c. 44, s. 2; C. S. 6610.)

§ 90-7. **Bond of secretary.**—The secretary of the Board of Medical Examiners shall give bond with good surety, to the president of the board, for the safe-keeping and proper payment of all moneys that may come into his hands. (Rev., s. 4497; Code, s. 3134; 1858-9, c. 258, s. 17; C. S. 6611.)

§ 90-8. **Officers may swear applicants and summon witnesses.**—The president and secretary of the Board of Medical Examiners of this state shall have power to administer oaths to all persons who may apply

for examination before the board, or to any other persons deemed necessary in connection with performing the duties of the board as imposed by law. The board shall have power to summon any witnesses deemed necessary to testify under oath in connection with any cause to be heard before it; or to summon any licentate against whom charges are preferred in writing, and the failure of the licentiate, against whom charges are preferred, to appear at the stated time and place to answer to the charges, after due notice or summons has been served in writing, shall be deemed a waiver of his right to said hearing, as provided in § 90-14.2. (1913, c. 20, s. 7; C. S., s. 6612; Ex. Sess. 1921, c. 44, s. 3; 1953, c. 1248, s. 1.)

Sec. 1. G.S. 90-9 is hereby rewritten to read as follows: "Section 90-9. **Examination for license; scope; conditions and prerequisites.**—It shall be the duty of the Board of Medical Examiners to examine for license to practice medicine or surgery, or any of the branches thereof, every applicant who complies with the following provisions: He shall, before he is admitted to examination, satisfy the Board that he has an academic education equal to the entrance requirements of the University of North Carolina, or furnish a certificate from the superintendent of public instruction of the county that he has passed an examination upon his literary attainments to meet the requirements of entrance in the regular course of the State University. He shall exhibit a diploma or furnish satisfactory proof of graduation from a medical college or an osteopathic college approved by the American Osteopathic Association at the time of his graduation, which time of graduation shall have been on January 1, 1960, or subsequent thereto and which medical and osteopathic schools shall require an attendance of not less than four years and supply such facilities for clinical and scientific instruction as shall meet the approval of the Board; but the requirement of four years' attendance at a school shall not apply to those graduating prior to January the first, nineteen hundred.

"The examination shall cover the following branches of medical science: anatomy, embryology, histology, physiology, pathology, bacteriology, surgery, pediatrics, medical hygiene, chemistry, pharmacy, materia medica, therapeutics, obstetrics, gynecology, and the practice of medicine.

"If on such examination the applicant is found competent, the Board shall grant him a license authorizing him to practice medicine or surgery or any of the branches thereof.

"Applicants shall be examined by number only; names and other identifying information shall not appear on examination papers." (Rev., s. 4498; 1913, c. 20, ss. 2, 3, 6; 1921, c. 47, s. 1; C. S. 6613; 1969.)

Sec. 2. G.S. 90-10 is hereby rewritten to read as follows: "Section 90-10. **Two examinations, preliminary and final, allowed.**—The State Board of Medical Examiners may examine any applicant for license to practice medicine on the subjects of anatomy, histology, physiology, bacteriology, embryology, pathology, medical hygiene, and chemistry, upon his furnishing satisfactory evidence from a medical school or an osteopath-

ic school approved by the American Osteopathic Association and supplying such facilities for anatomical and laboratory instruction as shall meet with the approval of the Board, that he has completed the course of study in the school upon the subjects mentioned. The Board shall set to the credit of such applicant upon its record books the grade made by him upon the examination, which shall stand to the credit of such applicant; and when he has subsequently completed the full course in medicine or osteopathic medicine and presents a diploma of graduation from a medical or osteopathic college approved as provided above, requiring a four years' course of study of medicine for graduation, and when he has completed the examination upon the further branches of medicine, to wit, pharmacy, materia medica, therapeutics, gynecology, pediatrics, practice of medicine and surgery he shall have accounted to his credit the grade made upon the former examination, and if then upon such completed examination he be found competent, said Board shall grant him a license to practice medicine and surgery, and any of the branches thereof." (C. S., s. 6614; 1921, c. 47, s. 2; Ex. Sess. 1921, c. 44 (1969).)

90-11. Qualification of applicant for license.—Every person making application for a license to practice medicine or surgery in the state shall be not less than twenty-one years of age, and of good moral character, before any license can be granted by the board of medical examiners: Provided, that the age requirement shall not apply to students taking the examinations of the first two years in medicine. (1921, c. 47, s. 3; Ex Sess. 1921, c. 44, s. 5; C. S. 6615.)

§ 90-12. Limited license.—The board may, whenever in its opinion the conditions of the locality where the applicant resides are such as to render it advisable, make such modifications of the requirements of the preceding sections, both as to application for examination and examination for license, as in its judgment the interests of the people living in that locality may demand, and may issue to such applicant a special license, to be entitled a "Limited License," authorizing the holder thereof to practice medicine and surgery within the limits only of the districts specifically described therein. The holder of the limited license practicing medicine or surgery beyond the boundaries of the district as laid down in said license shall be guilty of a misdemeanor, and upon conviction shall be fined not less than twenty-five dollars nor more than fifty dollars for each and every offense; and the board is empowered to revoke such limited license, in its discretion, after due notice. The clerk of the superior court, in registering the holder of a limited license, shall copy upon the certificate of registration and upon his record the description of the district given in the license (1909, c. 218, s. 1; C. S. 6616.) (The last sentence of this section was repealed by the repeal of the sections requiring registration with Clerks of the Superior Court.)

Section 90-13. When license without examination allowed.—The Board of Medical Examiners shall in their

discretion issue a license to any applicant to practice medicine and surgery in this State without examination if said applicant exhibits a diploma or satisfactory proof of graduation from a medical or osteopathic college, approved as provided in Section 90-9 and requiring an attendance of not less than four years and a license issue to him to practice medicine and surgery by the Board of Medical Examiners of another state. (107, c. 890; 1913, c. 20, s. 3; C. S. s. 6617; 1969.)

§ 90-14. Board may rescind license.—The board shall have the power to revoke and rescind any license granted by it, when, after due notice and hearing, it shall find that any physician licensed by it has been guilty of grossly immoral conduct, or of producing or attempting to produce a criminal abortion, or, by false and fraudulent representations, has obtained or attempted to obtain, practice in his profession, or is habitually addicted to the use of morphine, cocaine or other narcotic drugs, or is habitually addicted to the use of marijuana, barbiturates, demerol or any other habit forming drug or derivative of such drug, or has by false or fraudulent representations of his professional skill obtained, or attempted to obtain, money or anything of value, or has advertised or held himself out under a name other than his own, or has advertised or publicly professed to treat human ailments under a system or school of treatment or practice other than that for which he holds an earned diploma or degree or is guilty of any fraud or deceit by which he was admitted to practice, or has been guilty of any unprofessional or dishonorable conduct unworthy of, and, affecting, the practice of his profession, or has been convicted in any court, state or federal, of any felony or other criminal offense involving moral turpitude, or has been adjudicated a mental incompetent or whose mental condition renders him unable safely to practice medicine. And, for any of the above reasons, the said board of medical examiners may refuse to issue a license to an applicant. The findings and actions of the Board of Medical Examiners in revoking or rescinding and refusing to issue licenses under this Section shall be subject to review upon appeal to the Superior Court, as hereinafter provided in this Article. The Board of Medical Examiners may, in its discretion, and upon such terms and conditions and for such period of time as it may prescribe, restore a license so revoked and rescinded. (1921, c. 47, s. 4; Ex Sess. 1921, c. 44, s. 6; 1933, c. 32; C. S. 6618, 1953, c. 1248.)

§ 90-14.1. Judicial review of board's decision denying issuance of a license.—Whenever the Board of Medical Examiners has determined that a person who has duly made application to take an examination to be given by the board showing his education, training and other qualifications required by said board, or that a person who has taken and passed an examination given by the board, has failed to satisfy the board of his qualifications to be examined or to be issued a license, for any cause other than failure to pass an examination, the board shall immediately notify such person of its decision and

indicate in what respect the applicant has so failed to satisfy the board. Such applicant shall be given a formal hearing before the board upon request of such applicant filed with or mailed by registered mail to the secretary of the board at Raleigh, N. C., within 10 days after receipt of the board's decision, stating the reasons for such request. The board shall within 20 days of receipt of such request notify such applicant of the time and place of a public hearing, which shall be held within a reasonable time. The burden of satisfying the board of his qualifications for licensure shall be upon the applicant. Following such hearing, the board shall determine whether the applicant is qualified to be examined or is entitled to be licensed as the case may be. Any such decision of the board shall be subject to judicial review upon appeal to the Superior Court, of Wake County upon the filing with the board of a written notice of appeal with exceptions taken to the decision of the board within 20 days after service of notice of the board's final decision. Within 30 days after receipt of notice of appeal, the secretary of the board shall certify to the Clerk of the Superior Court of Wake County the record of the case which shall include a copy of the notice of hearing, a transcript of the testimony and evidence received at the hearing, a copy of the decision of the board, and a copy of the notice of appeal and exceptions. Upon appeal the case shall be heard by the judge without a jury, upon the record, except that in cases of alleged omissions or errors in the record, testimony may be taken by the court. The decision of the board shall be upheld unless the substantial rights of the applicant have been prejudiced because the decision of the board is in violation of law, or is not supported by any evidence admissible under this Article, or is arbitrary or capricious. Each party to the review proceeding may appeal to the Supreme Court as hereinafter provided in Section 90-14.11.

§ 90-14.2. Hearing before revocation or suspension of a license.—Before the board shall revoke or rescind any license granted by it to any physician, it will give to the physician a written notice indicating the general nature of the charges, accusation, or complaints preferred against him and stating that the licensee will be given an opportunity to be heard concerning such charges or complaints at a time and place stated in such notice, or to be thereafter fixed by the board, and shall hold a public hearing not less than 30 days from the date of the service of such notice upon such licensee, at which he may appear personally or through counsel, may cross examine witnesses and present evidence in his own behalf. A physician who is mentally incompetent shall be represented at such hearing and shall be served with notice as herein provided by and through a guardian ad litem appointed by the clerk of the court of the county in which the physician has his residence. Such licensee or physician may, if he desires, file written answers to the charges or complaints preferred against him within 30 days after the service of such notice, which answer shall become a part of

the record but shall not constitute evidence in the case.

§ 90-14.3. Service of notices.—Any notice required by this Chapter may be served either personally or by an officer authorized by law to serve process, or by registered mail, return receipt requested, directed to the licensee or applicant at his last known address as shown by the records of the board. If notice is served personally, it shall be deemed to have been served at the time when the officer delivers the notice to the person addressed. Where notice is served by registered mail, it shall be deemed to have been served on the date borne by the return receipt showing delivery of the notice to the addressee or refusal of the addressee to accept the notice.

§ 90-14.4 Place of hearings for revocation or suspension of license.—Upon written request of the accused physician, given to the secretary of the board 20 days after service of the charges or complaints against him, a hearing for the purpose of determining revocation or suspension of his license shall be conducted in the county in which such physician maintains his residence, or at the election of the board, in any county in which the act or acts complained of occurred. In the absence of such request, the hearing shall be held at a place designated by the board, or as agreed upon by the physician and the board.

§ 90-14.5. Use of trial examiner or depositions.—Where the licensee requests that the hearing herein provided for be held by the board in a county other than the county designated for the holding of the meeting of the board at which the matter is to be heard, the board may designate in writing one or more of its members to conduct the hearing as a trial examiner or trial committee, to take evidence and report a written transcript thereof to the board at a meeting where a majority of the members are present and participating in the decision. Evidence and testimony may also be presented at such hearings and to the board in the form of depositions taken before any person designated in writing by the board for such purpose or before any person authorized to administer oaths, in accordance with the procedure for the taking of depositions in civil actions in the Superior Court.

§ 90-14.6. Evidence admissible.—In proceedings held pursuant to this Article the board shall admit and hear evidence in the same manner and form as prescribed by law for civil actions. A complete record of such evidence shall be made, together with the other proceedings incident to such hearing.

§ 90-14.7. Procedure where person fails to request or appear for hearing.—If a person who has requested a hearing does not appear, and no continuance has been granted, the board or its trial examiner or committee may hear the evidence of such witnesses as may have appeared, and the board may proceed to consider the matter and dispose of it on the basis of the evidence before it. For good cause, the board may reopen any case for further hearing.

§ 90-14.8. Appeal from board's decision revoking or

suspending a license.—A physician whose license is revoked or suspended by the board may obtain a review of the decision of the board in the Superior Court of Wake County or in the Superior Court in the county in which the hearing was held or upon agreement of the parties to the appeal in any other Superior Court of the State, upon filing with the secretary of the board a written notice of appeal within 20 days after the date of the service of the decision of the board stating all exceptions taken to the decision of the board and indicating the court in which the appeal is to be heard.

Within 30 days after the receipt of a notice of appeal as herein provided, either by an applicant or a licensee, the board shall prepare, certify and file with the Clerk of the Superior Court in the county to which the appeal is directed the record of the case comprising a copy of the charges, notice of hearing, transcript of testimony, and copies of documents or other written evidence produced at the hearing, decision of the board, and notice of appeal containing exceptions to the decision of the board.

§ 90-14.9. Appeal bond; stay of board order.—The person seeking the review shall file with the clerk of the reviewing court a copy of the notice of appeal and an appeal bond of \$200 at the same time the notice of appeal is filed with the board. At any time before or during the review proceeding the aggrieved person may apply to the reviewing court for an order staying the operation of the board decision pending the outcome of the review, which the court may grant or deny in its discretion.

§ 90-14.10. Scope of review.—Upon the review of the board's decision revoking or suspending a license, the case shall be heard by the judge without a jury, upon the record, except that in cases of alleged omissions or errors in the record, testimony thereon may be taken by the court. The court may affirm the decision of the board or remand the case for further proceedings or it may reverse or modify the decision if the substantial rights of the accused physician have been prejudiced because the findings or decisions of the board are in violation of substantive or procedural law, or are not supported by competent, material, and substantial evidence admissible under this Article, or are arbitrary or capricious. At any time after the notice of appeal has been filed, the court may remand the case to the board for the hearing of any additional evidence which is material and is not cumulative, and which could not reasonably have been presented at the hearing before the board.

§ 90-14.11. Appeal to Supreme Court; appeal bond.—Any party to the review proceeding, including the board, may appeal to the Supreme Court from the decision of the Superior Court under rules of procedure applicable in other civil cases. No appeal bond shall be required of the board. The appealing party may apply to the Superior Court for a stay of that court's decision or a stay of the board's decision, whichever shall be appropriate, pending the outcome of the appeal to the Supreme Court.

§ 90-14.12. Injunctions.—The board may appear in its own name in the Superior Courts in an action for injunctive relief to prevent violation of this Article and the Superior Courts shall have power to grant such injunctions regardless of whether criminal prosecution has been or may be instituted as a result of such violations. (Sections 90-14.1 through 90-14.12 were added by 1953 Session.)

§ 90-15. License fee; salaries, fees and expenses of board.—Each applicant for a license by examination shall pay to the treasurer of the Board of Medical Examiners of the State of North Carolina a fee which shall be prescribed by said board in an amount not exceeding the sum of one hundred dollars (\$100.00) before being admitted to the examination: Provided, however, that in the case of applicants taking the examination in two halves, as provided in Section 90-10, one-half of the prescribed fee shall be paid by the applicant for each of the two half examinations. Whenever any license is granted without examination, as authorized in Section 90-13, the applicant shall pay to the treasurer of the board a fee in an amount to be prescribed by the board not in excess of one hundred dollars (\$100.00). Whenever a limited license is granted as provided in Section 90-12, the applicant shall pay to the treasurer of the board a fee of fifty dollars (\$50.00), except where a limited license to practice within the confines of a hospital for the purpose of education or training, the applicant shall pay a fee of ten dollars (\$10.00). A fee of ten dollars (\$10.00) shall be paid for the issuance of a duplicate license. All fees shall be paid in advance to the treasurer of the Board of Medical Examiners of the State of North Carolina, to be held by him as a fund for the use of said board. The compensation and expenses of the members and officers of the said board and all expenses proper and necessary in the opinion of the board to the discharge of its duties under and to enforce the laws regulating the practice of medicine or surgery shall be paid out of said fund, upon the warrant of the president and secretary of said board. The salaries and fees of the officers and members of said board shall be fixed by the board but shall not exceed ten dollars (\$10.00) per day per member for time spent in the performance and discharge of his duties as a member of said board, and reimbursement for travel and other necessary expenses incurred in the performance of his duties as a member of said board. Any unexpended sum or sums of money remaining in the treasury of said board at the expiration of the terms of office of the members thereof shall be paid over to their successors in office. (Rev., s. 4501; Code s. 3130; 1858-9, c. 253, s. 13; 1913, c. 20, ss. 4-5; 1921, c. 47, s. 5; Ex. Sess. 1921, c. 44, s. 7; C. S. 6619; amended, Session 1953.)

§ 90-15.1. Every person heretofore or hereafter licensed to practice medicine by said Board of Medical Examiners shall, during the month of January, 1958, and during the month of January in every even-numbered year thereafter, register with the Secretary-Treasurer of said Board his name and office and resi-

dence address and such other information as the Board may deem necessary and shall pay a registration fee fixed by the Board not in excess of ten dollars (\$10.00). In the event a physician fails to register as herein provided he shall pay an additional amount of ten dollars (\$10.00) to the Board. Should a physician fail to register and pay the fees imposed, and should such failure continue for a period of thirty days, the license of such physician may be suspended by the Board, after notice and hearing at the next regular meeting of the Board. Upon payment of all fees and penalties which may be due, not to exceed a total of one hundred (\$100.00) dollars of accumulated fees and penalties, the license of any such physician shall be reinstated.

§ 90-16. Board to keep record; publication of names of licentiates; transcript as evidence.—The board of examiners shall keep a regular record of its proceedings in a book kept for that purpose, together with the names of the members of the board present, the names of the applicants for license, and other information as to its actions. The board of examiners shall cause to be entered in a separate book the name of each applicant to whom a license is issued to practice medicine or surgery, along with any information pertinent to such issuance. The board of examiners shall publish the names of those licensed in three daily newspapers published in the state of North Carolina, within thirty days after granting the same. A transcript of any such entry in the record books, or a certificate that there is not entered therein the name and proficiency or date of granting such license of a person charged with the violation of the provisions of this article, certified under the hand of the secretary and the seals of the board of medical examiners of the state of North Carolina, shall be admitted as evidence in any court of this state when it is otherwise competent. (Rev., s. 4500; Code, s. 3129; 1858-9, c. 258, s. 12; 1921, c. 47, s. 6 (C. S. 6620).)

Sec. 90-17. Repealed by abolition of the requirement for registration with Clerks of the Superior Court.

§ 90-18. Practicing without license; practicing defined; penalties.—No person shall practice medicine or surgery, or any of the branches thereof, nor in any case prescribe for the cure of disease unless he shall have been first licensed and registered so to do in the manner provided in this article, and if any person shall practice medicine or surgery without being duly licensed and registered, as provided in this article, he shall not be allowed to maintain any action to collect any fee for such services. The person so practicing without license shall be guilty of a misdemeanor, and upon conviction thereof shall be fined not less than fifty dollars (\$50) nor more than one hundred (\$100), or imprisoned at the discretion of the court for each and every offense. . . .

Any person shall be regarded as practicing medicine or surgery within the meaning of this article who shall diagnose or attempt to diagnose, treat or attempt to treat, operate or attempt to operate on, or prescribe for or administer to, or profess to treat any human ailment, physical or mental, or any phy-

sical injury to or deformity of another person: Provided, that the following cases shall not come within the definition above recited:

1. The administration of domestic or family remedies in cases of emergency.

2. The practice of dentistry by any legally licensed dentist engaged in the practice of dentistry and dental surgery.

3. The practice of pharmacy by any legally licensed pharmacist engaged in the practice of pharmacy.

4. The practice of medicine and surgery by any surgeon or physician of the United States Army, Navy, or Public Health Service in the discharge of his official duties.

5. The treatment of the sick or suffering by mental or spiritual means without the use of any drugs or other material means.

6. The practice of optometry by any legally licensed optometrist engaged in the practice of optometry.

7. The practice of midwifery by any woman who pursues the vocation of midwife.

8. The practice of chiropody by any legally licensed chiropodist when engaged in the practice of chiropody, and without the use of any drug.

9. The practice of osteopathy by any legally licensed osteopath when engaged in the practice of osteopathy as defined by law, and especially §90-129.

10. The practice of chiropractic by any legally licensed chiropractor when engaged in the manual adjustment of the twenty-four spinal vertebrae of the human body and without the use of drugs.

11. The practice of medicine or surgery by any reputable physician or surgeon in a neighboring state coming into this state for consultation with a resident registered physician. This proviso shall not apply to physicians resident in a neighboring state and regular ly practicing in this state.

12. Physicians who have a diploma from a regular medical college or were practicing medicine and surgery in this state prior to the seventh day of March, one thousand eight hundred and eighty-five, and who are properly registered as required by law.

13. Any person practicing Radiology as hereinafter defined shall be deemed to be engaged in the practice of medicine within the meaning of this article. "Radiology" shall be defined as, that method of medical practice in which demonstration and examination of the normal and abnormal structures, parts or functions of the human body are made by use of x-rays. Any person shall be regarded as engaged in the practice of Radiology who makes or offers to make for a consideration, a demonstration or examination of a human being or a part or parts of a human body by means of fluoroscopic exhibition or by the shadow imagery registered with photographic materials and the use of x-rays; or holds himself out to diagnose or able to make or makes any interpretation or explanation by word of mouth, writing or otherwise of the meaning of such fluoroscopic or registered shadow imagery of any part of the human body by use of x-rays; or who treats any disease or condition of the

human body by the application of x-rays or radium. Nothing in this subsection shall prevent the practice of Radiology by any person licensed under the provisions of Articles 2, 5, 6, and 11 of chapter 110. (Rev. ss. 3645 4502; Code s. 3122; 1858-9, c. 253, s. 2; 1885, c. 117, s. 2; 1885, c. 261; 1889 c. 181, ss. 1, 2; 1921, c. 47, s. 7; Ex. Sess. 1921, c. 44, s. 8; 1941, c. 163; C. S. 6622.)

Sec. 90-19. Repealed by abolition of the requirement for registration with Clerks of the Superior Court.

Sec. 90-20. Repealed by abolition of the requirement for registration with Clerks of the Superior Court.

§ 90-21. **Certain offenses prosecuted in superior court: duties of attorney-general.**—In case of the violation of the criminal provisions of §§90-18 to 90-20, the attorney-general of the state of North

Carolina, upon complaint of the Board of Medical Examiners of the state of North Carolina, shall investigate the charges preferred, and if in his judgment the law has been violated, he shall direct the solicitor of the district in which the offense was committed to institute a criminal action against the offending persons. A solicitor's fee of five dollars shall be allowed and collected in accordance with the provisions of §§6-12. The Board of Medical Examiners may also employ, at their own expense, special counsel to assist the attorney-general or the solicitor.

Exclusive original jurisdiction of all criminal actions instituted for the violations of §§90-18 to 90-20 shall be in the superior court, the provisions of any special or local act to the contrary notwithstanding. (1915, c. 220, s. 2; C. S. 6625.)

Bulletin Board

COMING MEETINGS

North Carolina and South Carolina Ophthalmology and Otolaryngology Society, Joint Meeting—Ocean Forest Hotel, Myrtle Beach, South Carolina, September 14-16.

1969 Medical Progress Assembly—Birmingham Academy of Medicine, Birmingham, Alabama, September 14-16.

Duke University Medical Center, Cardiovascular Workshop—Durham, September 24.

Tennessee Valley Medical Assembly—Chattanooga, Tennessee, October 13-14.

North Carolina Chapter, American Academy of Pediatrics, and the North Carolina Pediatrics Society, Annual Meeting—The Carolina, Pinehurst, November 21-22.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY

Dr. C. Douglas Maynard, assistant professor of radiology at the Bowman Gray School of Medicine, is the author of a recently published textbook on nuclear medicine.

The book, "Clinical Nuclear Medicine," was published by Lea and Febiger of Philadelphia, Pa.

The 280-page book, which includes 353 illustrations, is designed to provide a practical source of information concerning the principles involved, the patient preparation necessary, the procedures followed, and the value and limitations of the commonly employed studies using radioactive materials.

Dr. Maynard's new appointment as assistant dean for student affairs at the medical school became effective July 1. He will continue to serve as chief of nuclear medicine, a position he has held since 1966 when he joined the Bowman Gray faculty.

* * *

Dr. Frank R. Lock, professor of obstetrics and gynecology, delivered the presidential address at the 92nd annual meeting of the American Gynecological Society in New Orleans.

His address, "The Right to be Well Born: Quality

vs. Quantity in Obstetrics and Gynecology," urged members of the society to undertake programs to determine the best means of providing satisfactory personal health services in the field of obstetrics and gynecology for all women in this country.

Dr. Lock, also a past president of the American College of Obstetricians and Gynecologists and the American Association of Obstetricians and Gynecologists, has been succeeded as president of the American Gynecological Society by Dr. Conrad G. Collins, professor of obstetrics and gynecology at Tulane University.

* * *

Three members of the Bowman Gray faculty have been elected to Heart Association offices. Dr. Robert A. Cordell, associate professor of surgery, was named vice president-elect of the American Heart Association. He will assume the position in November at the association's annual meeting in Dallas, Texas. Dr. Henry S. Miller, Jr., associate professor of medicine, recently was installed as president of the North Carolina Heart Association. Dr. Robert N. Headley, associate professor of medicine, was elected president-elect of the Forsyth County Heart Association.

* * *

More than 120 faculty members and medical students from 80 United States medical schools recently participated in a six-day institute on "Psycho-Social Aspects of Medical Training and Practice."

The institute, sponsored by the Behavioral Sciences Center of the Bowman Gray School of Medicine, dealt with some pressing problems that are common to most medical schools.

Twelve nationally recognized sociologists, psychiatrists, and medical educators served as faculty members for the institute. Students participated in two panel discussions—one on "What's Wrong with Medical Education" and the other on "Bridging the Generation Gap Between Faculty and Students."

* * *

Dr. Mariano F. La Via, professor of pathology, recently participated in the third International Conference on Biological Membranes in Stresa, Italy. He was one of 91 scientists who presented papers at the meet-

ing. He spoke on "Antibody Synthesis and Its Relationship to Membrane Systems of the Cell." Dr. La Via, who was born and educated in Italy, is noted for his work in immunology and immunopathology.

* * *

Dr. William M. McKinney, assistant professor of neurology, participated in the first World Congress on Ultrasonics held recently in Vienna, Austria. Representatives from 22 countries attended the meeting, which dealt with the use of high-frequency sound in medical diagnosis. Dr. McKinney, who for the past six years has been engaged in work on diagnostic ultrasound, presented a paper on "Pulsatile Echoencephalography." He was one of 30 Americans attending the meeting.

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Dr. Harold D. Green, professor and chairman of the Department of Physiology, has been reappointed to the Committee on Shock, Division of Medical Sciences, National Research Council. His new term began July 1.

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Dr. Richard T. Myers, professor and chairman of the Department of Surgery, spoke on "Surgical Aspects of Liver Disease" at the 74th annual meeting of the Seaboard Medical Association at Nags Head.

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Dr. C. Douglas Maynard, assistant professor of radiology, presented a paper on "Use of Cerebral Radioisotope Arteriography and the 1600 Channel Analyzer in Diagnosis of Brain Lesions" June 24 at a meeting of the Society of Nuclear Medicine in New Orleans. He also conducted a refresher course in "Indications and Contraindications for Radioisotope Studies" and presented a scientific exhibit on "Learning Resources for Nuclear Medicine."

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Dr. Charles E. McCall, assistant professor of medicine, presented a paper on "Stresses Upon the Human Neutrophil" at a recent meeting of the Infectious Disease Investigators of the South. The meeting was held in Atlanta.

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Dr. Robert E. Robinson, research instructor in medicine, recently presented two papers at the Mayo Clinic, Rochester, Minn. He spoke on "Clinical Laboratory Data Processing" and "Natural Language Techniques for Processing Surgical Pathology Reports."

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Dr. John A. Stanley, assistant professor of ophthalmology, presented a lecture on "Silicone Impregnation of the Corneal Stroma" June 7 at the Massachusetts Eye and Ear Infirmary and the Retina Foundation of Boston, Mass.

NORTH CAROLINA CHAPTER AMERICAN ACADEMY OF PEDIATRICS

The North Carolina Chapter of the American Academy of Pediatrics and the North Carolina Pediatric Society will hold their annual meeting at The Carolina, in Pinehurst, Nov. 21-22, 1969.

Officers of the Society are Dr. William L. London, state chairman; Dr. Frank R. Reynolds, alternate state chairman; Dr. Richard S. Kelly, president; Dr. George E. Prince, president-elect; Dr. Elwood Coley, secretary-treasurer.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

Dr. Ernest Craige of the University of North Carolina School of Medicine has been elected to the Board of Examiners for the Subspecialty of Cardiovascular Disease, American Board of Internal Medicine.

Dr. Craige is professor of medicine and chief of the Cardiology Division. A member of the UNC medical faculty since 1952, Dr. Craige is a past president of the American Association of University Cardiologists.

* * *

The University of North Carolina's School of Medicine and the New Hanover Memorial Hospital in Wilmington are engaged in a visiting professors program for the summer months.

Under the program, eight faculty members of the UNC School of Medicine spend two weeks each at the New Hanover Memorial Hospital.

Dr. Lockert Mason, director of medical education at the Wilmington hospital, and Dr. Louis G. Welt, chairman of the Department of Medicine at UNC, designed the program. They worked in conjunction with the University's Division of Education and Research in Community Medical Care.

The visiting professors include a specialist in chronic disease, a heart specialist, a kidney specialist, a blood specialist, a specialist in the diseases of the gastrointestinal tract, and a specialist in infectious diseases.

Participating doctors are UNC faculty members Robert Shaw, Janet Fischer and Oscar Sapp; Richard Walker, William Lassiter, and Daniel Young.

The visiting professors program operates from June through August.

* * *

James K. Sloan, a rising senior in the University of North Carolina School of Medicine, has been awarded a \$3,000 scholarship by Seeing Eye Inc. of Morristown, N. J.

A native of Wilmington, N. C., and a 1962 graduate of the University, Sloan served four years in the Army before returning to medical school to complete his education. His special area of research is corneal disease.

* * *

The University of North Carolina School of Dentistry sponsored a conference on Comprehensive Care in Clinical Dental Education at Southern Pines, June 16 through 19. It was the first such conference ever held in the United States and about 100 persons participated.

Dr. James W. Bawden, dean of the UNC School of Dentistry, was director of the conference, and Dr. Clifton E. Crandell, associate professor of oral diagnosis at UNC, was the associate director.

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for doctor bills

North Carolina Blue Cross and Blue Shield, Inc.

The conference was supported by the American Fund for Dental Education and the Procter and Gamble Company.

* * *

A federal grant of \$24,600 to the University of North Carolina School of Nursing will finance a short course for registered nurses now employed in local health departments, school systems, and community action programs.

The grant, from the U. S. Department of Health, Education and Welfare, supports a short course titled "Introduction to Public Health Nursing Concepts." The course will be conducted by the Nursing School's Continuing Education Program, in cooperation with the Division of Nursing of the State Board of Health.

The course will be offered Sept. 8-12 and repeated in the winter and spring of 1970. It is open to nurses now employed in community settings who have not had formal courses in public health.

Additional information may be obtained by contacting the Continuing Education Program, UNC School of Nursing, Chapel Hill 27514.

* * *

The University of North Carolina has been awarded a \$100,000 research grant in support of a continuing investigation on shock.

The grant from the Department of Health, Education and Welfare, which will cover a three-year period, has been awarded to Dr. George Johnson, Jr. of the Department of Surgery as principal investigator.

His research will seek to determine some of the water and mineral changes that occur within the body spaces as well as within the individual cells in shock.

Information from this study will be applied to the treatment of injured patients as well as those in shock from any cause, but especially those due to blood loss.

* * *

Mrs. Margaret B. Dolan of the University of North Carolina School of Public Health has been elected president of the National Health Council.

Mrs. Dolan is professor and head of the Department of Public Health Nursing in the School of Public Health here.

The National Health Council, which includes more than 65 major professional, voluntary, civic and proprietary organizations, sponsors the National Health Forum, which annually addresses itself to a pressing problem in the field of health care. This year's topic was "Health Care Problems of the Inner City."

A member of the UNC faculty since 1950, Mrs. Dolan is a past president of the American Nurses' Association.

* * *

Dr. Morris Schaefer, chairman of the UNC School of Public Health's Department of Health Administration, has undertaken a special assignment in Geneva for the World Health Organization.

Prof. Schaefer is serving as an advisor on the feasibility of an integrated management information system for the global organization.

The project arises from the request of the United Nations, WHO's parent organization, that all its special-

ized agencies develop compatible information systems over the next three years, to further coordinate UN development efforts throughout the world.

The present overseas assignment is Dr. Schaefer's sixth in the last five years and his first outside the Western Hemisphere.

* * *

A short course designed for faculty members in diploma schools in nursing has been announced by the University of North Carolina School of Nursing, Continuing Education Division.

The course, to be held Sept. 15-19, is titled "Fostering Student Creativity."

Faculty members include Dr. Vaida Thompson, assistant professor of psychology at UNC; and Ruth J. Harris and Bonnie Hensley, both assistant professor of nursing at UNC.

* * *

Some 170 persons from 16 states, representing a variety of academic disciplines, attended a two day pediatric symposium at the University of North Carolina in June.

The symposium, sponsored by the Division of Physical Therapy at the UNC Medical School, was designed for graduate physical therapists and other professionals in clinical education areas of pediatrics.

Among the guest speakers were Dr. Eric Denhoff, a pediatric neurologist from Providence, R. I., and Dr. A. Jean Ayres of the University of Southern California.

Betty Saunders of the UNC Division of Physical Therapy was project coordinator.

* * *

Six senior dental students and one faculty member were elected to membership in Omicron Kappa Upsilon, national honorary dental fraternity, at the University of North Carolina School of Dentistry's 16th honors convocation held in June.

Students are selected for scholastic accomplishment and for their potential growth in the dental profession. It is the highest academic honor that can be bestowed on a graduating dental student.

* * *

The ninth in a series of Summer Botany Conferences supported by the National Science Foundation was held at the University of North Carolina June 9-27. The conference was designed to acquaint 30 selected college teachers with recent advances in mycology, the study of fungi.

Director of the conference was Dr. Lindsay S. Olive, University of North Carolina Distinguished Professor of Botany. The staff from UNC included Dr. John N. Couch, Kenan Professor Emeritus of Botany, Dr. A. J. Donnas, associate professor of botany, and Dr. William J. Koch, associate professor of botany.

* * *

Special convocations and wards ceremonies marked graduation exercises in the Health Sciences Division of the University of North Carolina.

In individual ceremonies held June 2, the Schools of Nursing, Medicine, Dentistry and Pharmacy honored 1969 graduates.

Besides the separate ceremonies, all Health Science

schools participated in the formal commencement ceremony.

The School of Nursing convocation was highlighted by remarks from Mrs. Eunice Pellissier Bianco, a former UNC Nursing School faculty member. Dean Lucy H. Conant of the School of Nursing presented the graduates with pins and awards.

The Medical School hooding ceremony was followed by a reception at the Student Union. Dr. Floyd W. Denny, a member of the UNC Medical School faculty, was chosen by the graduating students to be the speaker for the event.

The 16th School of Dentistry convocation took place at noon in the Great Hall of the Student Union. Besides some 49 dental students who were hooded in the ceremony, 14 dental hygienists also received certificates. Dr. Phillip Blackerby of the W. K. Kellogg Foundation of Battle Creek, Mich., was the guest speaker.

Speaker at the Pharmacy School's convocation was Dr. George R. Herbert, president of the Research Triangle Institute.

NEWS NOTES FROM THE DUKE UNIVERSITY MEDICAL CENTER

Duke University trustees have created a vice presidency for health affairs and have elected Dr. William G. Anlyan to fill the new post.

Prior to this time, he has held the dual titles of associate provost of the University and dean of the School of Medicine. He also is professor of surgery.

Announcement of the change was made by Dr. Barnes Woodhall, chancellor pro tem of the University, who explained that the vice presidency for health affairs is more in keeping with the responsibilities of the office, and follows a developing pattern in medical centers across the country.

Dr. Anlyan is responsible for the affairs of the entire Medical Center, including Duke Hospital, the Schools of Medicine and Nursing, and the allied health professions.

This embraces operational and financial aspects of education, research and patient care within the Medical Center, plus supervision of a wide range of co-operative ventures with five individual hospitals—Watts, Lincoln and the Veterans Administration Hospitals here; Highland Hospital in Asheville; and the Sea Level General and Children's Hospital at Sea Level, N. C.

In addition, Dr. Anlyan coordinates Duke's interface with the North Carolina Regional Medical Program for Heart, Cancer and Stroke; and through his membership on the Governor's Advisory Council on Comprehensive Health Planning is involved in Duke's co-operative efforts with medical facilities throughout the state.

* * *

Twice during the past year, Dr. Anlyan has been recognized nationally. Last summer he was appointed by President Johnson to the Board of Regents of the

National Library of Medicine. Later in the year, he was chosen chairman of the Council of Deans of the Association of American Medical Colleges.

Those were but the latest of a long list of honors and responsibilities which have come his way. Dr. Anlyan has been a member of the Executive Council of the Association of American Medical Colleges since 1965, and a member of the Editorial Board of "The Journal of Medical Education" since 1964.

* * *

The newest addition to the Duke Medical Center, facing the Atlantic Ocean, is the Sea Level General and Children's Hospital at Sea Level, a Carteret County town of 500 people on Core Sound, about midway between Ocracoke and Cape Lookout.

This attractive, modern hospital has become a part of Duke through the generosity of its founder, D. E. Taylor of West Palm Beach, Fla., and members of his family. Mr. Taylor, a native of Sea Level who went north to Norfolk and became highly successful in the shipping business, started the hospital in 1953 because of his continuing devotion to Sea Level and its people.

The people at Duke look upon the acquisition as a great opportunity for learning and teaching in a wide scope of health services ranging from rural medicine to studies in the process of aging.

Much of the negotiation about Sea Level, which has extended over more than a year, has been between Mr. Taylor and Dr. Barnes Woodhall, former dean of medicine at Duke who is now serving as the university's first chancellor. The two men—the multi-millionaire shipper and the eminent neurosurgeon—struck an immediate friendship because of a common love of the sea.

The 88-bed Sea Level hospital fits into the framework of the Duke Medical Center much as does Highland Hospital, a psychiatric institution in Asheville that is a part of Duke. They operate as semi-independent hospitals, but they are integral parts of Duke and as such share the talent and services available at a major medical center.

Dr. Woodhall and Dr. William G. Anlyan, vice president for health affairs at Duke, have some specific ideas in mind for Sea Level.

One of these involves studies of the aging process and care of the elderly—a program in which Duke is one of the nation's leaders through its Center for the Study of Aging.

"That area of North Carolina," Dr. Woodhall said, "will provide us an excellent opportunity for aging research. The people there live very long lives, and this additionally will help us study requirements for maintaining the aged."

"The Medical Center," Dr. Woodhall said, speaking of the entire Duke medical complex, "must contribute to the development of adequate medical and nursing facilities, and Sea Level gives Duke the ideal location and setting in which to study and learn."

* * *

An extensive recruitment program aimed at adding dozens of new registered nurses to the Duke Univer-

sity Medical Center staff already has begun to produce results.

From May 15 through October 6, more than 60 RN's will have joined the Duke staff.

The recruitment program was begun in anticipation of the usual summer increase in resignations of nurses. In addition, new nurses are needed to staff hospital wards just reopened following renovation. When construction work was completed this spring, Duke began utilizing all 802 beds in the hospital, the most beds ever open before at one time.

Proposals in the planning stages to encourage professional nurses to use their skills at Duke include a paid summer residency program for student nurses, an expanded orientation program about Duke and the community, and an expanded special service program to help new RN's get situated in Durham.

Although nurse recruitment is being intensified at Duke to get more nurses on the staff this summer, the program has been established on a permanent basis for several years.

N. C. TUBERCULOSIS AND RESPIRATORY DISEASE ASSOCIATION

The North Carolina Tuberculosis and Respiratory Disease Association announces that it has funds to sponsor speakers on respiratory diseases at meetings of state level organizations, both medical and paramedical. It also has funds to support one-half-day, one-day, and three-day symposia outside the medical centers.

For additional information, contact C. Scott Venable, Executive Director of the North Carolina Tuberculosis and Respiratory Disease Association, Box 127, Raleigh, North Carolina.

NORTH CAROLINA BLUE CROSS AND BLUE SHIELD, INC.

North Carolina Blue Cross and Blue Shield will participate in a new national program to provide servicemen being discharged from active duty with a special short-term, low-cost health protection plan beginning September 1.

The serviceman will have his choice of a 90-day Blue Cross and Blue Shield certificate, including maternity benefits, or a 120-day policy offered by a commercial insurance company, which does not cover maternity.

The Blue Shield plan includes paid-in-full coverage of a physician's usual, customary, and reasonable charge, in-hospital medical care, intensive medical care, consultations, anesthesia, physical therapy, obstetrics, certain outpatient laboratory services, and limited dental care including oral surgery.

After the 90-day period, the discharged serviceman will be offered the option of converting to a regular contract with no break in coverage.

Under present federal law, all health care benefits under Defense Department-sponsored programs end, both for the serviceman and his dependents, on the day he is released from active duty, unless he is

being retired. Generally several weeks elapse before the discharged serviceman obtains health care coverage—usually through a group plan provided by his new employer.

In announcing the new short-term program, Secretary of Defense Melvin Laird pointed out that previously a man being discharged who had a pregnant wife was at a particular disadvantage since most insurance companies exclude any maternity benefits during the first 10 months of coverage. Maternity benefits are an exclusive feature of the Blue Cross and Blue Shield short-term program.

TENNESSEE VALLEY MEDICAL ASSEMBLY

The Tennessee Valley Medical Assembly will be held at Memorial Auditorium, Chattanooga, Tenn., Oct. 13-14, 1969. For information address David H. Turner, M.D., Chairman, 107 Interstate Building, Chattanooga, Tennessee 37402.

MEDICAL COLLEGE OF VIRGINIA

The following programs are planned by the Department of Continuing Education at the Medical College of Virginia for presentation during the coming months:

October 23-24, 1969. Forty-first Annual McQuire Lecture Series. Topic, Dermatology. Speaker, Dr. Eugene J. Van Scott, professor of dermatology, Temple University, Philadelphia.

November 21-22, 1969. Annual meeting of the Southern Society for Pediatric Research.

December 10-12, 1969. Ware Residence Program. Visiting professor, Dr. Roy Parker, professor and chairman of the Department of Obstetrics and Gynecology, Duke University.

February 6, 1970. Law Institute on Hospitals and Medicine.

February 19-20, 1970. Twenty-third Annual Stoneburner Lecture Series.

AMERICAN COLLEGE OF SURGEONS

Improved in-hospital emergency treatment of highway crash victims is the aim of a new educational program to be launched by the American College of Surgeons with financial assistance from the Insurance Institute for Highway Safety.

Dr. William Haddon, Jr., Institute president, announced that a \$15,000 grant had been made to enable the College's Committee on Trauma to undertake the program. The College is matching this amount and also will seek additional funding to expand the program.

Beginning with three eight-week educational projects for physicians to be conducted by members of the College of Surgeons in several parts of the country in rural areas, the program will be expanded nationwide.

Chairman of the Committee on Trauma of the American College of Surgeons is Dr. Curtis P. Ariz, professor of surgery and chairman of the Department of Surgery, Medical College of South Carolina, Charleston.

SOUTHEASTERN CHAPTER SOCIETY OF NUCLEAR MEDICINE

The Southeastern Chapter of the Society of Nuclear Medicine will hold its tenth annual scientific meeting at the Sheraton Nashville Hotel, 920 Broad Street, Nashville, Tenn., on Oct. 23-25, 1969. The chapter invites the participation of all interested persons.

The program will include panel discussions, contributed scientific papers, and teaching sessions on the applications of nuclear medicine. The instructional program will be accredited by the Academy of General Practice.

For information regarding participation in the program, persons should address: Richard L. Witcofski, Ph.D., Department of Radiology, Bowman Gray School of Medicine, Winston-Salem, N. C. 27103.

For other information, including registration, address Robert H. Rohrer, Ph.D., Department of Physics, Emory University, Atlanta, Ga.

AMERICAN ASSOCIATION OF BLOOD BANKS

Americans in good health can be blood donors now until their 66th birthday instead of the 60th or 61st as in the past.

A joint announcement of this liberalization of medical standards for blood was made recently by the American Association of Blood Banks and the American National Red Cross. The two organizations together collect and process 90% of the more than 6,500,000 pints of blood used annually for surgery and therapy in U. S. hospitals.

"This extension of the eligible age limit for blood donors is in recognition of two facts," explained Dr. Frank Coleman of Tampa, Florida, president of the Association. "First, that the need for blood is constantly increasing at a rate of about 12% annually. Second, that, thanks to better medical care, better nutrition, and other factors, Americans are living longer and also keeping their health and vigor longer than in the past."

Dr. Tibor J. Greenwalt, Medical Director of the American National Red Cross Blood Program, emphasized that any healthy person can give a pint of blood without worry.

AMERICAN HOSPITAL ASSOCIATION

Hospital utilization continued to increase in the first quarter of 1969, according to Hospital Indicators, a monthly report appearing in the June 16 issue of "Hospitals," Journal of the American Hospital Association.

The report, based on a continuing survey of 650 community hospitals, shows a total of 7,087,462 admissions to the nation's short-term community hospitals in the first three months of 1969. That is a 2.1% increase over the admissions reported in the comparable period of 1968.

The number of persons 65 and over admitted to hos-

pitals in 1969's first quarter was 1,498,949, or 5% more than in 1968's first quarter.

Visits to hospital outpatient departments were still on the increase from January through March, with 27,837,844 such visits being recorded. The total is 5.1% higher than the number reported in 1968's first quarter.

Hospitals are experiencing increased expenses in providing care to both inpatients and outpatients. Their total expenses in the early months of 1969 were \$4,051,249,000, or 16.5% more than in the first quarter of 1968.

According to indicators, hospital expenses are continuing to increase, but not as rapidly as in recent years.

ANNALS OF OPHTHALMOLOGY

Ophthalmologists and members of allied disciplines are invited to submit manuscripts on theoretical, experimental, or clinical subjects as well as reports of regional or national society meetings to the newly founded Annals of Ophthalmology.

The new journal has been founded to publish the many worthy papers that present ophthalmological journals printed in the English language must reject for lack of space.

To reduce the great time lapse between submission of papers and their publication.

To provide a multidisciplinary medium for the open discussion of new and emerging ideas in all phases of ophthalmology including minority and conflicting viewpoints.

To augment the professional literature of general ophthalmology by the rapid dissemination of theoretical, investigative, medical, and surgical ophthalmology.

Dr. John G. Bellows is editor of the new journal and Dr. Morris Fishbein is editorial consultant.

Mail manuscripts and inquiries to Editorial Correspondent Annals of Ophthalmology, 30 North Michigan Avenue, Chicago, Illinois 60602.

Dr. Klumpp Elected President Of Group Aiding Medical Schools

Dr. Theodore G. Klumpp, president of Winthrop Laboratories, a division of Sterling Drug Inc., has been elected president of the National Fund for Medical Education, an organization concerned with the financial problems of medical schools.

In addition to serving as head of a pharmaceutical manufacturing business, Dr. Klumpp—a physician—devoted the earlier years of his career to medical education as a representative of organized medicine, as a federal health agency official, and medical school professor. He also serves—or has served—on many government health commissions, particularly in the fields of cardiovascular diseases, vocational rehabilitation of handicapped persons and problems of the aging.

The Month in Washington

The Internal Revenue Service plans to audit the federal income tax returns of physicians and other health practitioners who have received more than \$25,000 a year in Medicare and Medicaid payments.

Plans for the special audit were disclosed by IRS Commissioner Randolph W. Thrower at the first of a series of public hearings the Senate Finance Committee is holding in its investigation of the rising costs of the two government health care programs. He said the Department of Health, Education and Welfare had agreed to require intermediary insurance carriers to use physicians' Social Security numbers on reports of payments under the program in the future.

Finance Committee Chairman Russell B. Long (D., La.) estimated "possibly as many as 10,000" had been getting upwards of \$25,000 a year under the programs. Thrower said the initial audits would be for 1967 and would be limited to those receiving more than \$50,000.

Long said that the investigation of the committee's staff so far showed "widespread abuse, and fraud, as well as lax administration."

Robert M. Ball, Social Security administrator, reported his investigators had looked into more than 700 possible fraud cases under Medicare. He said more than 300 of these cases were still in some stage of inquiry, and that 14 had been turned over to the Justice Department for prosecution.

"But these should not be taken as a reflection on the 200,000 doctors participating in medicare," Ball said. He added a bigger problem than outright fraud were "cases that don't quite become fraud."

HEW Undersecretary John G. Veneman told the committee that the Nixon Administration wants congressional authority to stop Medicare payments to doctors who overcharge, use inferior supplies, or engage in fraud.

"Under present medicare law, there is no authority for the program to deny reimbursement to a licensed practitioner, who has demonstrated a clear pattern of fraud, re-

peated overcharging of the program, or the use of supplies which are inferior or harmful," Veneman said.

Commenting on the hearings, Dwight L. Wilbur, M.D., president of the American Medical Association, said that the vast majority of physicians serving Medicaid patients are not overcharging for their services.

"Most physicians," Dr. Wilbur said, "are acting honorably and with utmost restraint. Fortunately, very few M.D.'s participating in medicaid are guilty of overcharging and otherwise exploiting the program. Such exploitation by a minuscule minority was unavoidable. . . ."

Meantime, HEW issued a regulation limiting the fees paid by states to physicians, dentists, and other health practitioners under Medicaid.

Under the regulation, a state's Medicaid payment to a physician for a service will be limited, with one exception, to the 75th percentile of the customary charge—the maximum customary fee of 75 per cent of the physicians in the area.

If a state has been paying more than the 75th percentile of the customary charge, it must not exceed the Medicare level, about the 83rd percentile. A Medicaid official said that only two states may have to roll back their fees, but declined to name them.

After July 1, 1970, states may request permission to increase physicians' fees above the 75th percentile if two conditions are met:

1. The average percentage increase requested above the 75th percentile on January 1, 1969, may not exceed the percentage increase in the all-services component of the Consumer Price Index (adjusted to exclude the medical component) or in an alternate index designated by the Secretary of Health, Education and Welfare.

2. Evidence must be clear that the providers and the states have cooperatively established effective utilization review and quality control systems.

The new fee regulation also requires states

to revise their Medicaid plans to include descriptions and details of their payment structures. A state that wishes to revise its payment structure for practitioners' services or change the payments authorized under it may not do so until the proposed changes have been approved by the Secretary of Health, Education and Welfare or his representative.

* * *

Dr. Roger O. Egeberg, who has been dean of the School of Medicine, University of Southern California since 1964, was selected to be the new Assistant Secretary of Health, Education and Welfare for Health and Scientific Affairs after a five-month delay.

President Nixon nominated Dr. Egeberg after HEW Secretary Robert H. Finch "reluctantly and regretfully" withdrew his unannounced but widely-publicized selection of Dr. John H. Knowles, director of Massachusetts General Hospital, Boston. Finch said that "the protracted and distorted discussion" about the appointment during the five months the post had been vacant "resulted in a situation in which he (Knowles) would not be able to function effectively in this critical position."

Throughout the public controversy before the appointment, the AMA confirmed its comment to a short statement that it had suggested several names to Finch for the post and that the Association "favored the appointment of someone who would represent the broadest scope of medicine and would not be too closely oriented to any one segment of medicine or the health field." Knowles was not one of the physicians on the AMA list.

Classified Advertisements

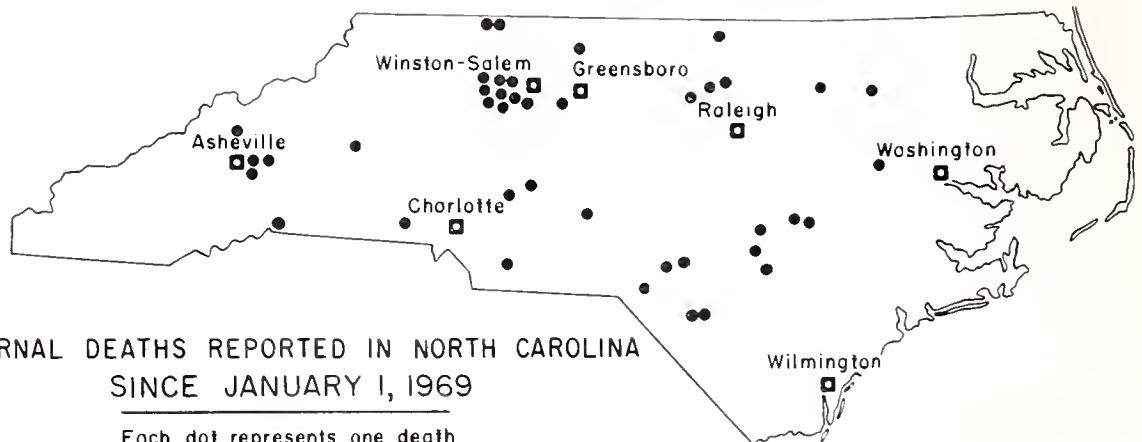
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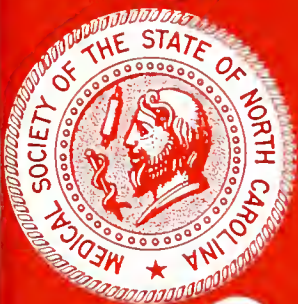
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PUBLISHED MONTHLY BY THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

IN THIS ISSUE:

Utilization Review

A Symposium

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Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported.

Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia.

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Simplified Approaches to Utilization Review: Background and Introduction

H. FLEMING FULLER, M.D., *Chairman*

The Medical Society of the State of North Carolina, as part of its program of continuing education, felt that physicians needed assistance in the area of utilization review. The North Carolina Hospital Association felt a similar need on the part of the administrative staff of its member hospitals. Stimulated by this interest, the Utilization Review Committee of the State Medical Society held a series of meetings involving representatives of the State Board of Health, Blue Cross—Blue Shield, the State Hospital Association and the Medical Society, to discuss methods and techniques for conducting an educational program that would meet the needs. It was decided that regional meetings held throughout the state would be the best means of accomplishing this purpose.

Subsequently six regional workshops were held. Physicians, hospital and nursing home administrators, medical record librarians, and members of governing bodies were invited, and attendance was excellent.

Why Utilization Review?

The quality of patient care has many aspects. The most efficient utilization of health care resources is one of them. Not only does it affect the individual patient directly, but it has economic implications for the com-

munity, the state, and the nation. Admittedly, other factors involved in quality care are equally important to the patient and the community. Utilization, however, can be more easily assessed than the other factors, in terms of time, personnel, and costs. Its effect can be measured. Valid comparisons can be made. Standards can be set.

This is not to suggest that efficient utilization in itself will guarantee high quality care. It will not; but it is an essential ingredient and is closely related to other aspects of quality. We must keep efficient utilization constantly in mind when considering the broad, overall picture of quality care. We may say that quality care is costly, which implies a high price; but it is not expensive, which would imply a price beyond value. Too often, less costly care of poor quality is exceedingly expensive in terms of human suffering and money.

There are two components of utilization which should be considered by those involved in the delivery of health care: (1) the effect on the patient, and (2) the effect on resources.

It is now recognized that every person should be able to obtain the best possible medical care when he needs it. Every patient in the course of his illness goes through different phases of varying duration, related to the intensity of care that he needs. It is poor quality medical practice to provide *less* intensive care than the patient's needs demand, or to apply it too late. It is equally poor medical practice to provide *more* intensive care than the patient's needs

A summary of papers presented at the six Regional Conferences on Utilization Review, November 12-21, 1968.

Six hospital administrators, representing the North Carolina Hospital Association, participated in the conferences, highlighting specific experiences under the program. The principal points in their presentations are incorporated in the three papers summarized here.

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require. Efficient utilization should primarily relate to the patient and his needs.

No one questions that health resources in terms of money, personnel, services, and facilities are in short supply relative to demands. This situation will continue for some time to come and makes it imperative that present resources be utilized to the best possible advantage. Part of the problem of the delivery of quality patient care is to relate supply to needs rather than demands. Efficient utilization is one attempt to do so. Its prime purpose is to improve the standards of patient care. In order to achieve this purpose, an organized program for the collection of standardized data must be set up at all levels. Each facility needs to collect and analyze its own data. It further needs to relate its study to other hospital data—local, state, and national. Only through the collection and study of such data can standards be determined or deficiencies, problems, and needs be studied.

Efficient utilization is a professional responsibility, and is so recognized by the

American Medical Association. The physician alone can provide the necessary direction and leadership. This is not to say that other professional disciplines do not have a role to play and a contribution to make. They are and should be involved in the process, but the basic responsibility lies with the physician.

The implementation of effective utilization review procedures for both Medicare and Joint Commission accreditation has produced a number of problems. The extent of these problems can be greatly modified by an understanding of the legal requirements and of time-saving methods and simplified procedures. It is hoped that through such an understanding the value of utilization review can be enhanced.

The purpose of these presentations is to offer suggestions and guidelines that may aid the physician in performing the functions of utilization review. What will be presented is the result of much discussion and deliberation among the agencies most directly concerned with quality care in our facilities.

* * *

Criteria for Utilization Review

THEODORE D. SCURLETIS, M.D.*

At the beginning of the Medicare certification program, all participating hospitals and extended care facilities were required to submit a written plan for utilization review and provide assurances that the plan would be implemented. In order to be acceptable, the plan was required to meet eight basic criteria. These basic requirements are dependent upon the fact that utilization review has two entirely different functions.

The first function is the review of individual case records to determine the necessity for hospital or other facility care of extended duration—that is, beyond a specific number of days as stated in the written plan. This function involves studying individual

long-term cases and determining the medical necessity for continued care.

The second function is the study of the broad patterns of utilization of the facility and its resources. This is a retrospective study and is not related to the individual patient as such. It is more closely related to the medical audit, of which it is an important part.

It should be noted that there are many types of plans which can fulfill the requirements of Medicare and perform the two functions just mentioned. Subject to the basic requirement, any written plan should reflect the needs of the particular facility and its medical staff. Because of this need to reflect staff and facility requirements, the plan requires the approval of the governing body as well as of the medical staff.

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Requirements of the Written Plan

Let us examine the eight basic requirements of any written utilization plan.

1. Organization and Composition

A committee consisting of two physicians is the acceptable minimum; however, a committee involving a larger number of physicians would seem to be more effective. The committee should be representative of the major departments and services of the facility. It should include a cross-section of the staff with authority to call personnel from other disciplines when necessary. There may be times when other medical staff members would be invited to serve temporarily for specific areas of study in which they have special competence. Similarly, the administrator or his designated representative should be involved in the utilization process to serve as resource persons by the committee. One key to an efficient and meaningful utilization review is the involvement of as many of the staff as possible over a period of time. Utilization review, properly conducted, is a useful educational tool for administrative and ancillary staff, as well as the medical staff.

Little has been said of the organization of the committee. The facility may have a separate utilization review committee, or may assign the functions to an already existing committee. It may also have different committees performing certain portions of the review process.

Regardless of the numerical composition or the organizational pattern, continuity of committee members is important. It is always a mistake to have the entire committee replaced at one time. Terms should be staggered to insure that experienced and knowledgeable members are serving at any given time.

2. Frequency of meetings

Meetings of the full committee should be held at least monthly. A monthly meeting will suffice for a retrospective review of utilization on a sample or some other basis, but obviously the requirement that extended care cases be reviewed within seven days cannot be met by a monthly meeting. Cases will meet the definition of extended dura-

tion on different days of the month. A case could go unreviewed for as long as 60 days if meetings were held only once a month.

Weekly meetings, though not necessarily of the full committee, would be the minimum necessary to meet the seven-day requirement. Where the volume of cases justify it, some committees do meet every week; however, a subcommittee or one or more physicians can conduct reviews for medical necessity or utilization evaluation. In other words, each member of the full committee may serve as a subcommittee. The subcommittee can conduct the review, make a determination, and report to the full committee at its monthly meeting. The action can be approved or disapproved by the committee and the results entered in the minutes. The subcommittee can, in any questionable case, request the assistance of the full committee in reaching a decision.

3. Types of records

Records are an essential part of the committee function. No specific type of record or form is required. As in the case of the overall written plan, there are many different types of acceptable records. What is important is the availability of information necessary for efficient utilization and for certification. As a minimum, the following records should be kept:

- a) A summary of the number and types of cases reviewed and the findings.
- b) A record of the problems identified by the committee in its review.
- c) Committee action in extended duration cases, with cases identified only by hospital case numbers.
- d) A record of administrative recommendations made by the committee.
- e) Copies of reports to the executive committee or its equivalent.
- f) Action resulting from previous committee recommendations.

As long as this information is available to the various parties interested in utilization review, the specific form in which it is kept is a choice of the facility.

4. Selection of cases for evaluation

Utilization evaluation, on a sample or other basis, is a requirement. The actual

method employed is a choice of the committee. There are several choices:

a) *By use of the services and facilities of an external organization* which will compile statistics, design profiles, and procure comparative data. The best example of this method, and the one most widely used in North Carolina, is the Professional Audit Study (PAS). Use of PAS will enable the committee to pinpoint utilization problems without having to review a mass of clinical records.

b) *By cooperative endeavor with the fiscal intermediary.* Blue Cross—Blue Shield, in processing claims, is able to accumulate data which can assist the utilization committee in reaching its objectives.

3) *By internal studies of medical records.* The studies could include all records or a representative sample—10%, for example—or discharges or admissions.

d) *By an ongoing study of selected diagnostic or therapeutic categories within the facility.* By comprising a larger sample, the more common diseases or therapeutic procedures would better serve the purposes of the study than would the rare diagnosis.

e) *By any combination of the foregoing.* The selection of a method will depend on the amount of material available and the type of study being made. Staff time is an important factor in the choice; availability of clerical help and other services are other considerations.

It is useless to collect data unless with a well defined objective. The object of utilization review is to improve the quality of care by making the most efficient use of available staff and facilities. To this end, the review functions must be carried out on a continuing basis, and must emphasize the identification and analysis of patterns of patient care. The sample should include, but not be limited to, a review of admissions, duration of stay, and professional services performed, with respect to the medical necessity of such services. Reviews should also include a sample of the recertifications of medical necessity made by the attending physician. Utilization review may reveal medical needs of the community outside the facility which otherwise may not be recog-

nized. More important than the specific method of sampling is the concept of an ongoing program of staff education. Since it is an educational process, considerable flexibility should be allowed, and priorities should be set by the committee.

5. *Definition of "extended duration"*

Each committee plan must specify what constitutes the definition of a case of extended duration. As mentioned previously, a review must be made of every case which reaches the number of days specified in the plan. The actual number of days, whether 7, 10, 15, or 30, is a choice of the committee writing the plan.

While the majority of facilities in North Carolina have specified one period of extended duration such as 15 days, the plan may designate a different number of days for different diagnostic or therapeutic categories.

Two additional points should be considered with respect to cases of extended duration. One is that no physician should review his own case. The reasons are obvious. This is not to imply that the attending physician is not involved in the review process. He should always be consulted regarding the case, and where there is a difference of opinion regarding the need for continued inpatient service, his opinion should be given great weight and should not be rejected except under unusual circumstances.

The second point is in regard to written notification in cases where the committee recommends termination of benefits. Some hospitals have not provided such a notice. Some think that notification is unnecessary in a small facility where close relationships exist between medical staff and administrative staff and the patient. It would seem wise even in these circumstances, however, to send a written notice to the attending physician, the administration, and the patient within 48 hours. Such a notice gives the attending physician an opportunity to discuss the decision with the committee if he so desires; it allows the business office to make other financial arrangements where necessary; and it enables the patient and his family to arrange for alternate care.

It should be noted that the committee does not discharge the patient. Only the attending physician can do this. The committee merely recommends the termination of inpatient benefits.

6. *Relationship to claims administration by third party*

The fiscal intermediary is in an excellent position to assist the utilization review committee in its work. An effective utilization review plan should provide for ongoing communication with the intermediary. This can assist the committee in identifying instances of inappropriate utilization of service. Further, the intermediary has data available for comparison between different facilities, and can offer suggestions to improve or simplify utilization review practices.

7. *Committee reports and their dissemination*

Any program will only be as successful as the communication system. Action is the result of interest, and interest is impossible without information. While they may take different forms and go through different channels, regular reports to the executive committee, and through them to the entire medical staff and governing body, are vital to an effective utilization review program.

8. *Involvement of the administrative staff*

The administration of the facility can support and assist the committee in assembling

information, facilitating review of charts, conducting studies, and maintaining committee records. It can also assist the physician in planning post-hospital care when appropriate. Administrators can do this by being aware of outside care resources and by arranging for the prompt transfer of medical and nursing information in order to insure continuity of care upon the patient's discharge to another facility. Given the opportunity, the administrative staff can provide services and assistance which will not only save time and effort on the part of the committee members, but will actually improve utilization.

Summary

The basic criteria have been presented briefly. It would be impossible to include in a single article the many alternative methods open to a utilization review committee. It is to be expected that new and different methods will be developed, and the requirements of Medicare and the Joint Commission on Accreditation of Hospitals are broad enough to allow these developments to proceed on an individual basis.

There is no single model plan. Each plan should be tailored to meet the needs of the individual medical staff and facility. Utilization review is still in an experimental stage, and change is expected.

* * *

Utilization Review Made Easier

ROBERT MYERS, M.D.*

My purpose in this discussion of hospital utilization review is to acquaint doctors and hospital administrators with a relatively new form of medical staff organization that saves time and effort for doctors and produces a more effective and valid evaluation of the quality of patient care rendered in the hospital. It does this by reducing duplication of work done by the medical staff and by providing a mechanism for rapid evaluation of patient care, including utilization of facilities and therapy.

Actually, utilization review is an integral

part of the evaluation of patient care and cannot be separated from other vital staff functions such as the review of cases to evaluate justification for surgery, and the assessment of medical records, therapeutics, and infections. What we are proposing is a better and easier method for conducting medical staff review of *all* aspects of patient care, including utilization.

Multiple vs. Combined Committee Structure

Traditionally, hospitals generally have strictly followed the recommendations of the American College of Surgeons and its successor, the Joint Commission on Accredita-

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tion of Hospitals in establishing their medical staff organizations. For the most part, these recommendations have listed specific standing committees, such as executive, credentials, medical records, etc. In fact nine standing committees were outlined by the Joint Commission, and hence slavishly followed until recently. They were the executive, credentials, joint conference, accreditation, medical records, tissue, utilization, infections, pharmacy, and therapeutics. Recently the Joint Commission wisely stated that the *functions* of these formerly specified committees were the important thing, and that as long as these functions were carried out properly, the former committee structure could be combined in any manner deemed best for the individual hospital.

If one examines the functions of the nine formerly required standing committees, he finds that each committee has two functions—(1) administrative, and (2) patient care. In each committee one of these functions far outweighs the other, and thus the nine committees fall naturally into two distinct groups: (1) those dealing largely with administrative matters, and (2) those concerned primarily with patient care. The first group includes the executive, credentials, joint conference, and accreditation committees; and common sense dictates that these four functions be combined and assigned to a single committee called the Administrative Committee. This merger, which is sanctioned by the Joint Commission, reduces the number of staff appointments and facilitates the work of the staff.

At one North Carolina hospital using this new streamlined medical staff organization, only five physicians serve on the administrative committee, whereas under the old system 13 physicians served on four separate committees. The new administrative committee consists of the president and secretary of the staff and three other physicians, all elected by the active staff at its annual meeting.

The second group of committees (those primarily concerned with patient care) consists of the committees on medical records, tissue, utilization review, infections, phar-

macy, and therapeutics. These functions can successfully be combined and assigned to one Medical Audit Committee. In the hospital mentioned above, under the old system, 24 physicians were appointed to the five separate committees. Now only 11 physicians are serving on the present medical audit committee, which is obtaining valid and definitive information about patient care given in the hospital, and with far less wasted motion and duplication of physicians' efforts than formerly. The vice president of the staff serves as chairman and other members are appointed by the president.

Keys to Successful Committee Function

The key to success in combining similar functions under two committees is for the chairmen of the administrative committee and of the medical audit committee to assign specific functions to designated members of their respective committees. For example, two or three members of the administrative committee can easily handle the infrequent duties of the credentials committee; three members of the same committee can perform the joint conference function, and one or two members can keep abreast of the accreditation function.

The same procedure can be followed with regard to medical records. Two or three members of the medical audit committee can be assigned to review deaths, the presence or absence of consultations that were required, and the conduct of care in coronary and pneumonia cases. Surgery can be evaluated by the simple method of reviewing those cases in which tissue specimens showed insignificant abnormalities or none, or those operations in which no tissue was removed (tubal ligations, lysis of adhesions, etc.) Drugs and other therapy can be the province of two or three members of the audit committee, and infections can be handled by one or two other physicians.

Where administrative matters have a bearing on any committee function such as the review of infections, a nursing representative, the administrator, the maintenance chief, and the housekeeping supervisor may be added to the committee as necessary. The same is true of the drug and ther-

apy function; the chief pharmacist may be a key man in making additions to, or deletions from, the formulary.

The second essential to success is the requirement that the staff members of the audit committee do their homework in advance of the regular meeting of the whole committee.

The third requisite is to have adequate by-laws, rules and regulations regarding the prompt completion of medical records, and to enforce them. Any incomplete record 14 days after a patient's discharge should mean automatic suspension of the delinquent physician's admitting privileges.

Evaluation of Cases

When we come to a more detailed discussion of the utilization function required of the medical staff, we must admit that it is impossible to streamline the process of determining "medical necessity" or the evaluation of patients in the hospital. Whatever the cut-off day for evaluation of inpatients, this task has to be done by examination of the charts, on the floors, by whatever method selected. Moreover, if we approach the utilization review honestly, we have to admit that Medicare is only one reason for the review. The Joint Commission on Accreditation of Hospitals also requires a utilization review, not only of extended inpatient care cases, but of all aspects of utilization in *all* cases—whether the hospital stay has been too long or too short, whether the treatment has been excessive or inadequate. Then comes the "retrospective review" of records of discharged patients, either by category of disease or operation, or by samples—whatever is determined by the staff and written into the utilization plan of the particular hospital. These are the two factors required for a utilization review.

Leaving to others the actual details of the methods recommended for valid utilization review, I will offer a few of my impressions of this required function.

1) The one essential to keep in mind is that the Medical Audit committee must be primarily interested in *patterns of patient care*, rather than the review of individual

cases, selected at random. We should ask ourselves, "How do we treat our pneumonia cases? Our post-cholecystectomy patients? Our coronary thrombosis cases? Only by pursuing this course can we, as physicians, hope to discover whether our patient care is superior, adequate, or inferior. By selecting every tenth case, as in the usual sample of utilization review, we fail to arrive at an overall picture of our treatment of patients with a specific disease or operation. The usual sample method is generally a waste of time and effort. It should be abandoned in favor of a review of selected categories of diseases and operations.

2) The ages of the patients in a specific category of disease should be considered in any evaluation of length of stay. For example, an infant or child undergoing inguinal herniorrhaphy is usually far better off convalescing at home after one or two postoperative days in the hospital, whereas the elderly patient with diabetes or heart disease would be expected to stay much longer after the same operation. A book is now available from the Commission on Professional and Hospital Activities (Ann Arbor, Michigan), the operators of PAS, which provides valid data from nation-wide surveys, concerning length of stay for common diagnoses and operations, based on both age and multiplicity of disease. Local hospitals can compare their data with the national averages presented therein.

3) Thirty days as the designated period constituting extended care will exclude from review many cases of shorter duration which are questionable in view of the disease or therapeutic procedure involved. For example, a 15-day stay for a child following herniorrhaphy would be excessive, if no complications occurred. Yet this case would not be evaluated under the 30-day designation.

One of our North Carolina hospitals reviews all hospital cases of 14 days' duration or longer, regardless of the patients' ages. On a particular date, one medical necessity review disclosed 34 patients who had been in the hospital at least 14 days. A review of 34 patients out of a usual population of 200 is not an excessive burden, and is easily

accomplished by seven physicians assigned to seven different ward areas, each being outside the reviewer's field of practice. Actually, a weekly review by a subcommittee is essential to effective utilization evaluation.

4) The average length of stay for certain categories of diseases and operations can be compared with the national averages for similar categories. At one North Carolina hospital a review of its post-cholecystectomy cases for a six months' period showed that its patients stayed, on the average, 2.7 days longer than the national average for similar patients. Over a six months' period a reduction in stay of 2.7 days would have totaled 108 hospital days, thus releasing needed beds for other patients. This particular hospital had a sizable waiting list. The question is, of course, did the hospital need *more* beds, as the doctors contended, or did it need better utilization of *existing* beds.

5) It is absolutely essential that the requirement for homework in advance of the regular meeting of the medical audit committee be enforced. Nothing is so frustrating and so wasteful of time as for committee members to come to the meeting with an armful of unevaluated records.

6) Recommendations as to stay, therapy, *etc.*, should be made to the audit committee and its chairman authorized to carry them out.

7) Patients who have stayed in the hospital two days or less should be carefully evaluated as to cause of admission. In my experience, these patients are frequently admitted with phony diagnoses, either (1) to permit them to collect medical care insurance for diagnostic studies otherwise not paid for by the insurance carriers; or (2) to permit treatment of alcoholism or mental conditions, generally barred from the general medical and surgical hospital. It is sad to say, but I firmly believe that such diagnostic categories as gastroenteric and abdominal pain are frequently used as wastebaskets to hold a batch of fake diagnoses. It is enough to make a statistician turn over in his computer.

8) It is usually beneficial to have a sus-

pected physician offender meet with the medical audit committee. Whether the meeting is held at lunch—which I strongly recommend as the best method of getting the members to attend—a free and frank discussion often does wonders in clearing the air or getting action.

9) The utilization review of inpatient records is a most effective method of insuring the prompt completion of records of admitted patients.

Professional Activity Study

And now I come to the clincher for my entire concept of streamlined medical staff organization. This is the use of the statistical data returned to hospitals by the Professional Activity Study of Ann Arbor, Michigan. Give me the two monthly Analysis Sheets, A and B, and the Diagnostic and Operation Listings, and I will cut the time and effort of monthly patient evaluation by physicians almost in half. Furthermore, I will make a comprehensive assessment that is not possible by any other method. I will sample 10% of the monthly discharges and by so doing will arrive at a valid estimate of the quality of patient care for that period. I will also make use of all possible lay assistants by enlisting the help of the medical records department staff. I will denote certain key areas, such as required consultations in sterilization procedures, where my assistants can rapidly find the charts that show the lack of such consultations, merely by running their fingers down the column of computer statistics for these data; and I will review only these charts. I will use the tissue column for my assistants to find only those charts that I will evaluate for unnecessary surgery. The same easy procedure will help me assess the validity of one-pint transfusions of blood, the prophylactic use of antibiotics, *etc.* I will also assess the adequacy of stay for selected categories of diseases and operations, and audit all other facets of patient care.

Conclusion

In North Carolina this simplified system of utilization review is well within the grasp

of most hospitals; for, through the generosity of the Duke Endowment, about 70% of the general medical and surgical hospitals in North Carolina have a unique opportunity to benefit from a streamlined medical staff organization, using PAS to sample the quantity and quality of patient care in any hospital, large or small, urban or rural, teaching or nonteaching. We can even facilitate the retrospective review of patients' records for utilization purposes.

It is all there waiting to be used. Why not try it? You will be surprised by the time and effort you will save and the amount of valid information about patient care you will have for the first time.

Incidentally, this system will give the medical profession more time for its primary purpose—the care of sick and injured patients.

Maternal Deaths from Toxemia of Pregnancy in North Carolina, 1946-1965

W. JOSEPH MAY, M.D.,* FRANK C. GREISS, JR., M.D., AND STEPHEN G. ANDERSON, M.D.

Excluding amniotic fluid embolism, toxemia of pregnancy is the only cause of maternal deaths unique to the gravid state. If all pregnant women received adequate prenatal care and appropriate management of toxemia in its incipency, such deaths would be almost completely prevented. However, toxemia of pregnancy is the leading or a major cause of deaths in most maternal mortality studies. The purpose of this paper is to report North Carolina's experience with fatal toxemia of pregnancy during the past 20 years.

Material

From August 1, 1946 through December 31, 1965, 506 maternal deaths in North Carolina were due primarily to toxemia of pregnancy. The methods of analysis of maternal deaths were presented in a previous paper.¹ The results of this analysis constitute the basis of the present report. The deaths in this report do not include those from hypertensive vascular disease without evidence of superimposed toxemia.

Results

During the entire 20-year period, toxemia was the second major cause of maternal deaths. However, the most significant de-

crease in maternal deaths from specific causes occurred in this area (Fig. 1). Toxemia deaths decreased from 4.0 to 0.92 per 10,000 live births, a greater than 75% reduction, while direct causes of obstetric deaths as a whole decreased only 66%. This rate of reduction has been sustained, although muted, so that toxemia fell from the second to the third leading cause of maternal deaths during the 1961-65 period.

The classification of toxemia of pregnancy, specific mechanisms of death, and factors responsible for these deaths are presented in Table 1 and 2 and Figure 2. Few

Table 1
Classification of Pregnancy Toxemia Causing
Maternal Deaths in North Carolina

Category	1946-50 %	1951-55 %	1956-60 %	1961-65 %
Preclampsia, severe	20.8	28.1	17.5	18.4
Eclampsia	67.2	55.1	62.3	63.3
Hypertensive vascular dis- ease with super-imposed toxemia	12.0	16.8	20.2	18.3
Totals	100.0 (192)	100.0 (196)	100.0 (69)	100.0 (49)
Absolute number of deaths in parentheses				

changes have occurred in these areas during the entire 20 years. It is noteworthy that 22.5% of deaths occurred from heart failure, primarily pulmonary edema, while 29.2% occurred from uncontrolled convulsions or their frequent sequelae, cerebral vascular accidents. Of particular significance are the

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Table 2

Mechanism	Mechanisms of Death from Toxemia of Pregnancy				
	1946-50	1951-55	1956-60	1961-65	1946-65
	%	%	%	%	%
Heart failure	30.3	18.9	13.0	20.4	22.5
Convulsions, uncontrolled	18.7	19.4	5.8	16.3	17.0
Cerebrovascular accident	3.1	13.8	24.6	24.5	12.2
Renal shutdown	6.8	13.3	11.6	6.1	9.9
Miscellaneous	4.1	3.6	5.6	4.0	4.2
Indeterminate	37.0	31.0	39.4	28.7	34.2
Totals	100.0(192)	100.0(196)	100.0(69)	100.0(45)	100.0(506)
Absolute number of deaths in parentheses					

cases in which no prenatal care was received (Fig. 3). In 1946-1950, 38.5% of pregnant women destined to die received no prenatal care. In 1961-1965, this figure had progressively increased to 55%.

Comment

From 1946 to 1965, little has been added to our practical knowledge of toxemia of pregnancy. Old dictums have been promulgated, new techniques have been acquired to suspend or overcome crises, and pathophysiological responses have been documented, but the fundamental facts that successful management of pregnancy toxemia is predicated upon the prompt recognition of the entity, and that the toxemic process continues until pregnancy is terminated, remain unchanged.

What factors then explain the dramatic reduction in this state's toxemic deaths? Examination of the present data suggests that the improvement is as much a product of an enlightened, more affluent society, appreciative of the need for adequate prenatal care, as it is of progress in medical care. Regular prenatal visits have become an expected part of total medical care during pregnancy in most of North Carolina. When compromised by educational, geographic, or economic unavailability, specific programs—local, state, or federal—have been implemented in many areas to overcome these deficiencies.

Since toxemia of pregnancy appears to be as much a sociological as a medical problem, maintenance of a continuing reduction in toxemic deaths depends equally upon continuing improvement in sociological conditions and medical care. The steady increase

in the number of women dying of toxemia of pregnancy without prenatal care (Fig. 3) not only reinforces this concept but raises pertinent questions regarding those factors in our society militating toward a denial of sociological and medical progress. The adverse responses of unmarried teen-age girls to the traditional delivery of prenatal care are but a single illustration of new challenges to the medical and social community.² As further challenges evolve from our changing society, medicine and society must be sufficiently flexible to meet these needs or the accomplishments of the past two decades will be seriously compromised.

As society responds to make prenatal care increasingly available, physicians have an increased responsibility to act promptly up-

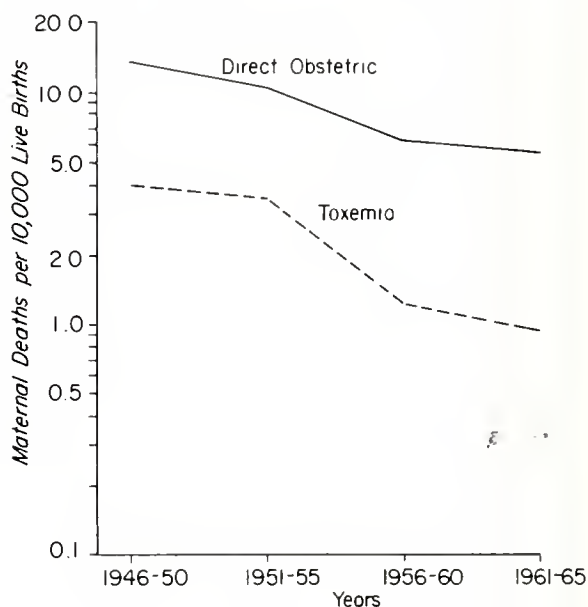


Fig. 1. Semi-log graph illustrating the greater reduction in toxemic deaths in North Carolina as compared to direct obstetric deaths as a whole.

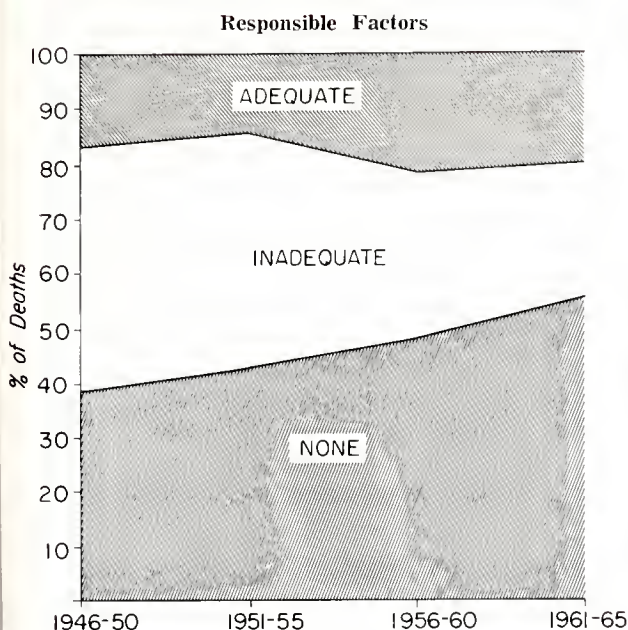


Fig. 2. Responsibility for maternal deaths from toxemia has changed little from 1946 to 1965.

on the insidious prenatal signs which indicate impending serious illness. However, throughout this review it became evident that the early warning signs—excessive weight gain, edema, mild proteinuria, and a slight elevation of blood pressure were either disregarded or treated inadequately by the physician. Too often, outpatient observation was continued when hospitalization was indicated. Under these circumstances, it would be expected that the potential seriousness of the patient's condition was not communicated to her and that admonitions regarding weight gain, salt restriction, and rest were accepted lightly.

The second error in management prevalent in this review may be, in part, a result of the first error described above, for when severe preeclampsia or eclampsia developed in a patient, often the initial reaction of the physician was to effect delivery immediately. The severely toxemic woman is in a very labile state, and the stimulus of labor, anesthesia, or operative manipulation may precipitate fatal sequelae. Experience has shown that a 24-to 48-hour period of adequate sedation and observation not only stabilizes the patient's condition, but permits evaluation of her cardiovascular, renal, and neurological status. With this

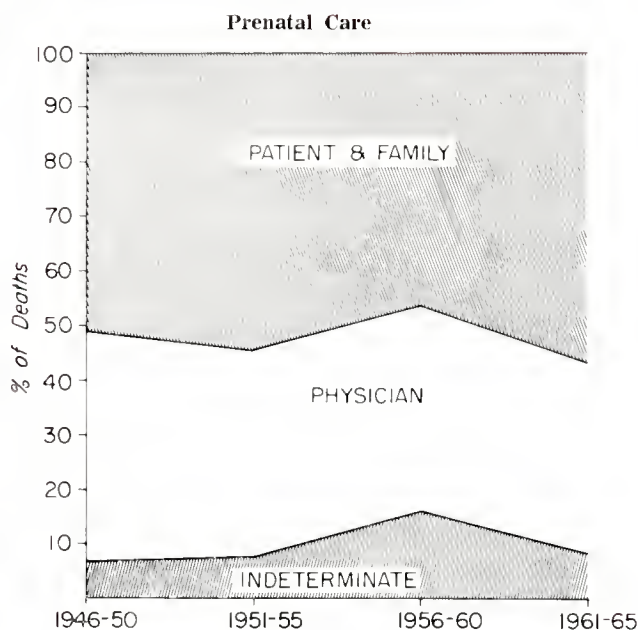


Fig. 3. The proportion of women dying of pregnancy toxemia who received no prenatal care has progressively increased from 1946 to 1965.

background, the physician is in a better position to anticipate and manage complications, and the patient is better able to withstand the stresses of labor and delivery. Delayed action upon the early signs of pregnancy toxemia accounted for much of the inadequate prenatal care depicted in Figure 3, while inappropriate therapy following hospitalization accounted for many of those maternal deaths occurring in women whose prenatal care was otherwise considered adequate.

Summary

Maternal deaths from toxemia of pregnancy in North Carolina decreased markedly from 1946 to 1965. The types of toxemia, specific mechanisms of death, and factors responsible for the deaths were essentially unchanged during this period, while the proportion of cases in which no prenatal care was received has risen progressively. The data suggest that social changes contributed significantly to the reduced death rate. Areas for improved medical care are discussed.

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Pain in the Hand and Wrist

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The patient who presents the complaint of pain in the wrist or hand offers an interesting array of diagnostic possibilities. The proper management is often obvious and uncomplicated, once the correct diagnosis is made, and the diagnosis is often readily determined if only it occurs to the clinician and he makes the proper search for it. Generally speaking, we will consider the more common disorders first, and we will exclude acute trauma.

Tendinitis and Tenosynovitis

Tendinitis and tenosynovitis can occur in various parts of the hands and wrist. In fact, I will momentarily overstep the bounds of this topic and mention lateral epicondylitis. This is such a common disorder that I felt it should be named in any discussion of pain in the upper limb.

A kind of tendinitis, if tendinitis is loosely defined, lateral epicondylitis is an inflammatory reaction about the attachment of the extensor muscle mass to the lateral epicondyle of the humerus, and about the annular ligament. It is readily diagnosed from (1) the complaint of pain in the lateral side of the elbow, extending toward the wrist and aggravated by gripping movements; (2) tenderness well localized in the lateral side of the elbow; and (3) reproduction of pain on resisted extension of the wrist.

Another common form of tendinitis occurs at the lateral border of the lower part of the forearm and wrist, where the long abductor and the short extensor tendons of the thumb crop from beneath the extensors to the wrist and fingers and then pass over the radial styloid. At this point these tendons are enclosed in a sheath which may become inflamed, usually from some type of repetitive activity such as that of a stock clerk who opens cartons all day. The inflamed sheath may become constrictive, and the patient

feels pain which he vaguely locates on the lateral side of the wrist. The area is tender, and there is usually pain on resisted extension and abduction of the thumb. At times, if the patient is asked to clutch his adducted thumb into his palm, close his fingers over it, and then forcibly deviate his wrist toward the ulna, the intensity of the resultant pain will cause him to strike the physician forcibly with his other fist. This reaction is quite pathognomonic, and may be termed "the clobbered doctor's sign." I am speaking now, of course, of de Quervain's disease, an elegant eponym for a common complaint.

Almost as frequent as de Quervain's disease is a constrictive tenosynovitis of the long flexor tendon of the thumb or one of the other digits, usually the index or long finger. A nodule forms within or upon the tendon at the point of constriction of the sheath, at about the level of the head of the metacarpal. The patient has pain in the palm or in the digit itself, and experiences an uncomfortable snapping of the digit on extension or tightly gripped flexion. The thumb or finger will sometimes even lock as the sheath traps the enlarged nodule. This is the common "trigger" finger or thumb.

Less commonly, tendinitis may occur in the insertion of the tendon of the flexor carpi ulnaris; there is tenderness over the pisiform, and pain on flexion of the wrist against resistance. Even less commonly, tendinitis can occur distally within the long flexor tendons to the fingers, and presumably elsewhere in the wrist and hand.

Almost any of the inflammatory conditions of the tendons and tendon sheaths can cause one or more flecks or even larger deposits of calcium, visible on x-ray. Calcification is more common in the chronic and recurrent acute cases. Sometimes, if the deposit is acute, is large, soft and fluffy in outline, and is of relatively low density as seen on x-ray, it might be under pressure and contributing to the patient's distress. This is less common than the small, hard,

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dense flecks with smooth outlines that are characteristic of old deposits, and which are footprints of the disorder rather than causes of pain.

Usually tendinitis or tenosynovitis should be treated by local injection of an anesthetic agent and repository corticosteroid into the point of maximum tenderness; by aspiration of any acute calcific deposits that may be present; by splinting the part; by local applications of moist heat (except in extremely acute cases, in which cold applications may be more useful); and by the oral administration of anti-inflammatory agents such as phenylbutazone. Usually these conditions will respond to such treatment, even the trigger finger and de Quervain's tenosynovitis. Occasionally a patient with the latter complaint will require section of the sheath of the involved tendons, but this procedure should be done only after conservative measures have failed. An injection into the point of tenderness of a trigger finger or thumb will largely relieve the pain, but a painless snapping often remains, and pain will usually recur. For this reason, and because the injection is so painful, I have more readily proceeded with surgical release of the tendon sheaths.

Arthritis

Osteoarthritis occurs primarily in the distal interphalangeal joints of the fingers, and in the interphalangeal and carpometacarpal joints of the thumb; it occurs less commonly in the proximal interphalangeal joints of the fingers. The so-called Herberden's nodes are discrete nodules on the dorsum of the distal joints of the fingers; they consist of osteochondral spurs at the joint margins and localized thickening of soft tissue overlying the spurs. This is a hypertrophic form of arthritis, and should be distinguished from rheumatoid arthritis because of the more aggressive treatment necessary for the latter.

Rheumatoid arthritis is characterized by recurrent acute episodes or a smoldering, subacute course. It usually develops at an earlier age than osteoarthritis, and in the hand it predominates in the metacarpophal-

angeal joints. Furthermore, the joint reaction caused by rheumatoid arthritis is more intense and more extensive than that of osteoarthritis.

Osteoarthritis in the fingers is helped, but not greatly, by rest, salicylates, and paraffin baths. Rheumatoid arthritis, of course, requires general and intensive medical treatment as well as orthopedic measures, and it demands more patience than most mortal doctors possess. All physicians who treat rheumatoid arthritis should be aware of the growing trend toward early surgery, which is being found to have a dramatic impact on the course of the disease.

Gout is another type of arthritis that can occur in the hand and wrist, and there are still others.

The Carpal Tunnel Syndrome

The carpal tunnel is formed by the bones of the carpus, composing its floor and sides, and by the transverse carpal ligament composing its roof. Through it pass the four deep and four superficial flexors of the fingers, the long flexor of the thumb, and the median nerve. Sometimes as an aftermath of a Colles fracture, at other times as a result of lesser or repeated trauma, at still other times because of gouty deposits, tuberculous inflammatory changes, or rheumatoid arthritis, and most commonly of all for no apparent reason, the tunnel becomes too small for the structures passing through it.

The most outstanding characteristic of the carpal tunnel syndrome is the vagueness of its symptoms. Typically, the patient has pain in his wrist and hand, most prominently at night and aggravated by extreme flexion of the wrist. Often, as one would expect, pain radiates via the distribution of the median nerve, and it is sometimes uncomfortable for the patient to flex the fingers actively. Sometimes tenderness is noted on tapping the volar side of the wrist. Frequently there is at least some hypesthesia of the volar side of the thumb, index and long fingers, and radial half of the ring finger, but usually only a part of the area supplied by the median nerve is involved. Atrophy of the thenar eminence occurs late.

If the diagnosis is assured, and if symptoms are of even moderately long duration, I feel that no purpose is served by temporizing with conservative measures, but simple splinting of the wrist in a neutral or slightly dorsiflexed position may be used if symptoms are mild or if there is some doubt of the diagnosis. To attack surgically, we must be sure that the line of incision crosses the flexor skin crease obliquely, that the motor branch of the median nerve to the muscles of the thenar eminence is not injured, and that the transverse carpal ligament is sectioned completely throughout its width. The point of constriction is usually distal to the distal flexor crease of the wrist. If surgical release of the carpal tunnel does not relieve the symptoms, then either the diagnosis was incorrect or the release was inadequate.

Causalgia

A disturbing but fortunately rare condition is causalgia, and it can occur in the hand. The diagnosis is usually apparent from a history of trauma in which there has been partial loss of continuity of a nerve, from the extreme and often bizarre nature of the pain, from intolerance to touch or certain other stimuli which may be remote from the point of discomfort, and possibly from atrophic skin changes. There have been reports of causalgia or a related neuritis occurring in the superficial sensory branch of the radial nerve, but I have not seen it.

Another post-traumatic condition is the common Sudeck's atrophy. This is a trophic disturbance which can develop in the hand after fractures or even very minor trauma, and in which hyperemia, edema, tenderness, a painful stiffness, cold perspiration, and trophic changes in the skin are evident. This is probably a disturbance of sympathetic innervation, with vasospasm of the terminal arterioles. It responds, although slowly, to persistent physical therapy, and early diagnosis and aggressive management are important. The patient is usually anxious. I have found it helpful to stand over him (or usually her) and make her even more nervous by shouting, "I don't care if your hand

does hurt; the bone is all healed. *Now move those fingers.*" Usually the patient becomes more afraid of me than of the hand, and she either restores motion or finds another doctor. With restoration of movement, the vasomotor changes gradually subside.

Angina can occur exclusively in the fifth finger, or so I have been told, but I have never encountered it. The pain radiating from a lesion of a cervical nerve root is more common, and pain in the hand can result from disorders about the shoulder, such as capsulitis or compression of the thoracic outlet.

Neoplasms

Glomus tumor is often mentioned as a painful benign neoplasm of the hand, especially the finger. Neuromas can occur in digits after trauma, especially after amputations, and are diagnosed by localized tenderness. An attempt at treatment may be made by injection, but usually these lesions will require resection.

Raynaud's Disease

Raynaud's phenomenon and disease are usually apparent from the definitively phasic nature of the episodes. Ischemia manifested by a bluish white color and numbness, due to arteriolar constriction, is followed by cyanosis and aching which occurs with capillary dilation, and finally hyperemic redness and burning; scleroderma is often a later stage. At times only one or two fingers are involved. Erythromelalgia is a painful hyperemia of the hands precipitated by warmth, but it is doubtful if this condition is a specific clinical entity.

Infection

Infection of the deep spaces of the hand is no longer common, but it can and still does develop after penetrating wounds of the skin, often so slight as to be unrecognized. After inadequate antibiotic therapy a deep infection of the hand can become occult and be overlooked. Pain is usually severe with one or another movement of the hand, and there may or may not be systemic manifestations of infection. One of the flexor tendon sheaths or the deep palmar or thenar space may be involved. These infections, if detected quite early, can often

be aborted with massive antibiotic therapy, and I do not believe that the old rule that immediate drainage is mandatory still applies. Drainage, of course, should not be further delayed if 24 hours or so of antibiotic therapy has no impact.

Conclusion

Emotional disorders can cause apparent weakness and paralysis, but very seldom pain, of the wrist and hand, except as extension from the neck or shoulder where

psychogenic discomfort is much more common. If there is no reason to suspect liability or workmen's compensation as a motive for malingering, a patient who complains of pain in the wrist or hand deserves the assumption on the part of the clinician that something is physically wrong. Even if symptoms at first seem vague, a careful search will usually reveal a specific disorder which, more often than not, is responsive to specific treatment.

Diagnosis of Brain Abscess in Infants and Children A Retrospective Study of Twenty-six Cases

S. JAN EBERHARD, M.D.

(CONCLUSION)

DISCUSSION

Signs and symptoms

The diagnosis of brain abscess in infants and children is difficult, because there is no classic progression of signs or symptoms leading to early recognition. Each case differs in so many aspects that only a high index of suspicion and an adequate period of surveillance will prompt studies that will lead to earlier diagnosis and treatment. Although many cases occur without apparent cause, the majority are associated with congenital heart disease, trauma, or infection anywhere in the body, but particularly in the ears, sinuses, and lungs.

As noted by several authors,^{3,8,22-25} symptoms are usually secondary to infection, localized neurological abnormality, or increased intracranial pressure. As in this series, headache is present in almost all the cases,^{13,14,17,26} is usually the presenting symptom, and is frequently localized to the general area of the cerebral abscess. It is accompanied in a large majority of cases by lethargy, malaise, and drowsiness. Over 50% of patients have nausea and vomiting, frequently occurring in early morning. A similar percentage will also have some local-

izing neurological abnormality which may infrequently be the presenting symptom and is usually manifested by localized weakness, seizures, or both. The latter is always important^{13,14} but especially so in infants, in whom seizures, vomiting and a tense fontanelle are often the first and only findings.⁹⁻¹²

Contrary to previous reports,^{3,14,27} fever is a common sign and is likely to occur in all patients during the course of the disease. Hypothermia, which in the past was thought to be more frequent than temperature elevation,^{28,29} was noted only twice in this series and was present for only a short period.

The idea that focal neurological signs are unusual in cases of brain abscess has persisted since it was first emphasized by Holt³ in 1893, but this notion was not confirmed by the present series. Besides the high incidence of seizures and paresis mentioned previously, papilledema, extensor Babinski responses, and Brudzinski signs were seen on admission in 48%, 36%, and 28% of the cases respectively; each of a large variety of other signs was seen in only an occasional case. Many other frequent signs, such as clubbing, cyanosis, purulent tympanic membranes, are the result of an underlying disease and should increase suspicion of brain abscess.

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Diagnostic aids

Whenever the history and physical examination is suggestive of brain abscess, a complete blood count, an electroencephalogram, and a lumbar puncture should be performed. The EEG is a simple, painless diagnostic tool which revealed abnormalities in all 11 cases in which it was utilized in this series, lateralizing the lesion in 10 of 11 cases and actually localizing it in 9 cases. Although many authors have failed to mention its use, Matson,²² Ziegler³² and others^{30,31} consider brain abscess to be the intracranial lesion most consistently localized accurately by EEG. Normal rhythm is replaced first by theta (3.9-6/second) and finally by slow, high amplitude delta waves, changes which may become apparent before more complicated contrast studies become positive.³⁰ As emphasized by Pine,³³ a positive result is not specific for brain abscess but merely indicates a need for more definitive diagnostic studies. Davidoff²⁸ feels that a normal EEG is excellent presumptive evidence that a brain abscess does not exist. In McGreal's series,¹⁴ EEG localized the lesion in 54% of the cases, and contributed to the diagnosis in 75%, while Loeser²⁷ found the EEG to be localizing in 70% of his 41 cases.

Although no marked abnormalities of the CSF are characteristic of this disease, in 17 of 19 cases there was elevation of pressure, protein concentration, or white blood cell count, either separately or in combination. It is frequently said that the CSF is normal in a large percentage of cases,²³ but this finding was not confirmed by the present series; nor by Nestadt¹³ and Pennybacker and associates,³⁴ who found abnormal values in 90% of their cases; nor by Sanford,⁵ who mentioned an elevated WBC in all 13 cases in infants reported in the world literature prior to 1928.

Davidoff and others²⁸ have observed that the CSF may become acellular or contain only a few lymphocytes after encapsulation has occurred, but this is unusual and is generally associated with an elevated protein level, increased pressure, or both. In reviewing the world's literature of mycotic brain abscesses, Duque³⁵ found no specific CSF changes.

Although an indirect indicator of brain abscess, an elevated white blood cell count should lead to a focus of infection if one is not already apparent. In 80% of the present cases, the presenting WBC was greater than 10,000 cu mm of blood, and provided valuable information when combined with other available data.

Other nontraumatic, easily performed studies include skull films, brain scans, and echoencephalography. Skull films may reveal suture diastasis, shift of the pineal gland, fracture, calcification or intracranial gas formation or fluid level.^{34,36} In the present series, suture diastasis was seen in four cases, while pineal shift, fracture, and intracranial calcification were noted in one case each. Although the yield of positive results is generally low, Loeser²⁷ found abnormal results in 36 of his 73 cases. Russell and colleagues,³⁷ in reporting a case and reviewing the scant literature concerning intracranial gas-gangrene abscesses, found a gas bubble on x-ray in 67% of their cases, while Zizmor and others³⁸ found an air-fluid level in 50% of their cases.

Brain scan was abnormal in two of three patients in this series; however, the false negative result occurred in a patient with a documented abscess, thus casting serious doubt on the real value of this method as a consistent diagnostic tool. In a study of 658 brain scans by Overton and associates,³⁹ 162 were positive, 2 of these being due to brain abscess. Because of the presence of one false negative, they studied their cases further and discovered that in all three cases brain scans and angiograms were normal until encapsulation began to occur, at which time both became positive. Encapsulation does not appear to ensure a positive brain scan, however, because Askenasy and others⁴ reported a case of negative scan in a patient with a chronic, encapsulated brain abscess.

Echoencephalography, a technique which fell into disfavor in the early 1950s and has only recently aroused renewed interest, indicated abnormalities in both cases in which it was tried. As noted by Grossman,⁴¹ the practical diagnostic use of ultrasound in intracranial diseases is limited to determination of the position of cerebral midline struc-

tures in relation to the lateral wall of the skull. It provides no information concerning the size or location of the lesion, but can be used as a simple method of following the course of suspected intracranial lesions. Displacement of 2 mm in children and 3 mm in adults is considered the upper limits of normal. Jeppson⁴² claimed an accuracy rate of 97.8%, with false negatives resulting from lesions of the posterior fossa or frontal lobe and a rare false positive coming from technical errors or misinterpretation.

Ventriculography, arteriography, and pneumoencephalography are more definitive diagnostic tools which render information concerning the size and location of an intracranial lesion, and should be utilized when warranted by the clinical situation and preliminary diagnostic studies. Films were positives in 18 ventriculograms. The one false negative arteriogram was followed by a ventriculogram (which was positive) because of clinical evidence of brain abscess and an abnormal, localizing EEG. The one false negative pneumoencephalogram also occurred in the face of a localizing EEG and abnormal CSF; antibiotics cleared the CSF, but the abnormal EEG persisted, and a brain abscess ruptured into the lateral ventricle three weeks later.

None of these three methods are completely without risk. Matson²² emphasizes that arteriography is especially dangerous in patients with congenital heart disease, because of the increased tendency to intravascular thrombosis. Butler¹¹ has noted the possibility of rupture of a brain abscess with the use of ventriculography, while Anderson³⁶ feels that pneumoencephalography is contraindicated if brain abscess is suspected, because of the possibility of brain stem herniation.

While most authors feel that ventriculography is the method of choice,^{22,43} others have recommended increased use of arteriography.^{34,44} Pineda discussed eight comatose or semicomatose patients, all of whom underwent carotid arteriography for diagnosis of expanding intracranial lesions (one of which was a brain abscess), and concluded that the condition of patients did not deter-

iorate when this method was used and that it is the treatment of choice in supratentorial lesions in debilitated patients.

Treatment and mortality

No statistically valid conclusions regarding treatment can be drawn from this series, but two results are suggestive. One is that the mortality tends to be lower with complete excision, and the other is that 100% mortality may be expected without treatment.

Treatment of brain abscess has been studied more extensively than any other aspect of the disease, with conflicting results. Balantine⁴³ best summarized available data when he remarked that it is not possible to standardize the approach to treatment of these lesions. In general, the majority of authors^{23,25,36,43,45} use one of three methods or some combination thereof: (1) repeated tapping—for abscesses located far from the surface without well-defined capsules; (2) catheter drainage—for cerebellar abscesses and superficial cerebral abscesses which are poorly encapsulated; and (3) excision—for well-encapsulated lesions in "non-vital" areas. Local and/or systemic antibiotics are of value in all forms of treatment.

The technique of repeated tapping was greatly improved by Kahn,⁴⁶ in 1928, when he introduced the use of Thorotrast* in the abscess cavity which was taken up by macrophages in the capsule of the abscess and allowed evaluation of the progress of treatment. In 1947, however, it was discovered that this substance was tumorigenic, probably due to radiation from the thorium particles, and subsequently more than 60 cases of tumor have been reported (none of which involved the central nervous system, however).⁴⁷ As a result, Clarke and others,⁴⁸ in 1962, introduced Steripaque,** which acted in the same manner as Thorotrast but was not radioactive or tumorigenic; this study was confirmed by Alexander⁴⁹ in 1964. Due to its inert nature, Clarke felt that Steripaque was harmless even if it entered the CSF.

*A radioactive substance with a half-life of 1.4×10^{10} year.

**A suspension of fine particles of barium sulfate, 0.1 to 0.5 micron in size.

but Blindermann⁵⁰ showed subsequently that both agents (Thorotrast and Steripaque) cause an inflammatory reaction of the leptomeninges and should not be introduced into the subarachnoid space.

Jooma and others,⁵¹ in reviewing 295 cases, favored excision because of the low associated mortality, but noted that this mode of treatment resulted in a greater incidence of residual neurological deficits, primarily visual field defects. Ballantine and White⁴³ confirmed these findings and also noted an increased incidence of aphasia. Authors of several other large series^{23,26,27,34,52} have also favored excision as the treatment of choice, usually following initial aspiration and instillation of radiopaque media. Gotten and Howser,²⁹ in a study including subdural and epidural abscesses, concluded that their series showed "overwhelmingly" that drainage with antibiotics was the treatment of choice; however, that statement was not proved by their study. Finally, Liske and colleagues, in reviewing 110 cases of brain abscess from 1940 to 1962, found no difference in the mode of surgical treatment from the standpoint of mortality.⁵³

The mortality in this series was similar to that in most series reported since the beginning of the antibiotic era. That a significant decline in mortality has occurred during this period was shown by the study of Ballantine and White⁴³ and others,^{23,27,35} who noted that drugs were especially effective in preventing death secondary to operative sepsis. The only drawback noted was that the diagnosis was sometimes obscured, since antibiotics allow more insidious development. After much controversy concerning treatment, it has been agreed that the only way to reduce mortality further is to make the diagnosis earlier.^{22,26,43}

Morbidity and prognosis

As confirmed by the present series, although in a smaller number of cases, Northcroft and others⁵⁴ found seizures, paresis, and mental disorders, in that order, to be the most common sequelae of brain abscess, occurring in 47, 25 and 25 per cent of the cases, respectively. Seventy-five per cent of

ictal phenomena occurred between six months and one year following surgical treatment, and were not increased by type of organism, mode of entry, instillation of antibiotics or radiopaque material, or a history of seizures earlier in life. Unlike Kerr's series,²⁶ where no case of epilepsy occurred in survivors who were in the first decade of life, five of the six patients with morbid seizures in this series had them before the age of 10 years.

Kerr²⁶ emphasized the point, which was confirmed by the present series, that deterioration of consciousness was of considerable prognostic import; there were no deaths among those of his group who had no clouding of consciousness, while a 50% mortality was recorded for the comatose group. If the patient becomes unconscious, it is likely that either rupture or brain stem compression has occurred.

Etiology

As seen in this series, brain abscesses usually stem from one of five origins: (1) congenital heart disease with a right-to-left shunt (tetralogy of Fallot accounting for 75% of cases); (2) trauma; (3) tympanomastoiditis or sinusitis; (4) metastasis from the lungs, pleura, or other primary site; (5) some unknown cause. Since the advent of antibiotics, it has become apparent that the relative frequency of brain abscesses of various causes has changed markedly. Brain abscesses secondary to trauma, pulmonary abscess, and middle ear disease, which dominated series in the pre-antibiotic era, have become relatively less frequent than those due to congenital heart disease and those of unknown etiology in the antibiotic era.^{3,11,22,43} An exception to this general trend is found in Nestadt's group of 35 patients, 18 of whom acquired brain abscess secondary to middle ear disease.

Newton²¹ reported a higher incidence of brain abscess (47-8%) and occlusive vascular disease (10%) discovered at autopsy in victims of CHD than in the general population. It was also significant that cerebral thrombosis was common in patients with CHD before the age of 2 years, while there

has never been a case of brain abscess in CHD reported before 2 years of age.²² One patient in this series, a 2-year 2-month-old white male with tetralogy of Fallot died in 1949 (case 23) while being evaluated for cardiac surgery. Although his death was thought to be due to intracerebral thrombosis, he was found at autopsy to have a large brain abscess which had not been considered before. As confirmed by the present series, the length of history was noted by Matson²² to be much shorter than in patients with brain abscess associated with some other cause.

Subacute bacterial endocarditis (SBE) is considered to be an extremely rare finding in association with CHD and brain abscess; only four cases are documented in the literature.²² Two patients in the present series (cases 13 and 23) were thought to have SBE before death, although blood cultures were negative. At autopsy, however, heart valves with vegetations consistent with a healing SBE were found in both patients.

Skull fracture or other apparent signs of trauma are not necessarily present in patients with intracerebral abscess secondary to trauma (case 10).⁵⁵ This fact was emphasized by Horner and colleagues,⁵⁶ who reviewed the world's literature for brain abscess caused by broken pencil points (5 cases) in which skull films were consistently negative in all cases, even when the lead was found within the substance of the brain.

Location and pathogenesis

As would be expected, the frontal, temporal, and parietal lobes were the most commonly involved sites. Brain abscess secondary to some distant focus is generally found in the distribution of the middle cerebral artery, while that due to tympanomastoiditis is located in the temporal lobe or cerebellum,^{36,37} and that due to sinusitis is usually in the frontal lobe. Although the temporal lobe is generally involved far more frequently than the cerebellum, Victor²⁵ notes that cerebellar abscess from direct extension is relatively more frequent in children because the tympanic cavity is thicker and less brittle in children than in adults.

The pathogenesis of brain abscess is commonly divided into three somewhat indistinct stages.⁵⁸ The first is characterized by a focal encephalitis, and the patient is usually slightly febrile, drowsy, and complains of headache, although he may be asymptomatic. Improvement occurs in two to three days with progression to the second or "latent" stage in which encapsulation occurs; the patient may be asymptomatic, but usually has headache, drowsiness and occasional fever. The third stage is heralded by the onset of localizing neurological signs, at which time his condition may rapidly deteriorate owing to increased intracranial pressure or rupture into the ventricular system. In general, however, staging is almost impossible because the clinical picture depends on the location of the abscess and its effect upon the spinal fluid.

Incidence

Although several authors have reported a decrease in the incidence of brain abscess during the antibiotic era,^{22,23,36} Liske and others^{25,43,53} found no change and attributed this to two factors: (1) emergence of new organisms, and (2) the recovery of many patients who would have died in the first stage in the pre-antibiotic era and who now undergo encapsulation. The effect of diagnosis of the lesion on incidence has not been evaluated. Of the 26 cases discussed here, 11 occurred in the first 10 years, while 15 were collected in the last decade of the 20-year period studied. All cases occurred since the advent of antibiotics.

Bacteriology

Most authors have stated that the majority of intracerebral abscesses are due to staphylococci, streptococci, and pneumococci, but no case in this series was caused by pneumococci.^{5,25,36} Loeser²⁷ noted a decrease in the *Pneumococcus* since 1944, with a concomitant increase in the alpha *Streptococcus*. Multiple organisms were frequently found, including both anaerobes and aerobes. Heineman and others⁵⁹ reported an excellent retrospective study in which they found 16 of 18 abscesses positive for anaerobic organisms; 10 of the 16 grew anaerobes alone.

McFarlan,⁶⁰ in a retrospective study, had been the first person to comment on a high percentage of anaerobes. It was suggested that the high percentage of sterile cultures was found in the series containing the highest percentage of anaerobes.

In 1961 the world literature contained only 16 cases of mycotic abscess, 11 of which were due to *Cladosporium trichoides* and 3 to *Fonsecaea pedrosoi*.³⁵ None of the present series was caused by a fungus. Another new, unusual cause of brain abscess is *Hemophilus aphrophilus*.⁶¹ Blattner noted that the Communicable Disease Center in Georgia had reported 34 cases of infection due to this organism, 10 of which were brain abscesses.⁶² The source is thought to be from the saliva of animals, particularly dogs.

Summary

1. Twenty-six cases of proven brain abscess in infants and children ranging in age from 32 days to 15 years are reviewed, with special emphasis on the diagnostic features of this disease. The scant pediatric literature is reviewed, and the results of this study are compared with pertinent reports involving all age groups.

2. Reduction of the high mortality rate (38% in the present series) can be achieved only by earlier diagnosis. The burden of the problem lies with the pediatrician since the neurosurgeon rarely sees the patient first, unless a severe localizing neurologic abnormality is present or the patient is unresponsive to stimuli.

3. Headache is the most common symptom and is reported in almost 100% of patients who are old enough to talk. Other symptoms present in well over 50% of cases include lethargy, malaise, drowsiness, anorexia, nausea, vomiting, and localizing neurological symptoms. Contrary to previous reports, the most common sign in the present series is elevation of temperature of 1 degree Fahrenheit or more. Other common signs include papilledema, extensor Babinski responses, and seizures.

4. A complete blood count, examination of the cerebrospinal fluid, and electroencephalography should be performed on all patients in whom brain abscess is suspected,

and at least one of these will be abnormal in almost all cases. In the present series, the white blood cell count, cerebrospinal fluid and EEG were abnormal in 89%, 89%, and 100% of the cases, respectively. Skull films, brain scans, and echoencephalograms may provide additional information, while more definitive diagnostic methods include pneumoencephalography, ventriculography, and arteriography.

5. Brain abscess in infancy is almost always characterized by vomiting, seizures, and a bulging fontanelle.

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The Case Against the Contraceptive Pill

JESSE CALDWELL, M.D.

Oral contraception has made a big splash in the society of human beings during the past decade. Dedicated advocates of birth control are ecstatic about it. The foundations of the Roman Catholic Church are being shaken by it. Citizens are demanding the "right" to get pregnant when they want to. Some are also demanding the "right" to an abortion in cases of unwanted pregnancy. The medical profession is caught in the middle of this phenomenon.

Development of Contraceptive Drugs

For 30 years it has been known that small doses of synthetic hormones could prevent ovulation in the human female. Stilbestrol, introduced in 1938, has been used for this purpose in the treatment of dysmenorrhea.

The role of the modern physician in the area of contraception originally grew out of the need to protect some patients from the hazards of a future pregnancy. Before World War II, when sterilization was rare, high-risk obstetrical patients were given contraceptive advice as part of their medical care. Surgical sterilization is now a common operative procedure, and contraceptive service is considered an element of ordinary medical practice. These trends reflect the willingness of the profession to bow to social pressures.

In 1950 Gregory C. Pincus, seeking an oral contraceptive agent and working as Research Director of the Worcester Foundation for Experimental Biology, reasoned that ovulation did not occur in the pregnant woman because of the presence of increased amounts of progesterone. At first he tried using natural progesterone to imitate this condition for contraceptive purposes, but he found that prohibitively large doses were needed. Later, more than 200 synthetic hormone substances were studied before the combination of norethynodrel and mestranol were presented to a physician, Dr. John Rock, for clinical testing.

In 1956 Pincus introduced his contraceptive pill at the Fifth International Conference of the Planned Parenthood Federation. In 1960 his materials were approved by the Federal Food and Drug Administration for use as a contraceptive. Since its introduction the original contraceptive has been made available in reduced dosages, and other products have been introduced and marketed.

Mechanism and Side Effects

As everyone now knows, among other effects, the synthetic oral contraceptives suppress pituitary function to the extent that gonadotropins are not produced. The absence of the gonadotropins in the female results in failure to ovulate.

Early reports on the use of the original combination in Puerto Rico mentioned symptomatic and objective side effects in as many as 71% of the users. As many as 22% of the women had to discontinue the compound because of adverse reactions.

As late as 1965 Frank and Tietze² reported that of 14,157 women taking oral contraceptives, 3,374 (nearly 25%) had discontinued the regimen. This fact, however, did not deter the reporters from concluding that oral contraception had proved to be highly acceptable.

Also in 1965, because of the many side effects being observed, the Food and Drug Administration was moved to study further the matter of oral contraceptives. The result was the Hellman Report, submitted on August 15, 1966. This report, following nine months of study, did little more than give cautious approval to the pill. It mentioned that insufficient evidence had been presented to prove that the pill caused certain adverse conditions, and recommended studies to acquire more facts.

As a result of the report, however, the FDA has, since November, 1966, required all marketers of oral contraceptives to list as product information certain adverse reactions "observed with varying incidence."

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Also, the marketers are required to list the indications for use and certain warnings and precautions to be observed.

The side effects required to be listed show that virtually no system in the body escapes the effects of oral contraceptives. The adverse reactions are listed as product information in physician's packages and also in all advertising of the products.

Product information is required to state that thrombophlebitis, pulmonary embolism, and neuro-ocular lesions have occurred in users of oral contraceptives, although the cause and effect relationship has not been established. A number of laboratory tests which may be altered by oral contraceptives must also be listed.

In June, 1967, Dr. Pincus received the American Medical Association's Scientific Achievement Award, given in recognition of outstanding work by a non-physician scientist. A few months later he died at the age of 64. Since 1967 medical journals and the lay press have published an impressive number of articles about complications resulting from use of contraceptive drugs.

Liu³ reported that cytological abnormalities found in gynecological smears were more common among patients taking oral contraceptives. Cormia⁴ reported alopecia from their use. Resnik reported melasma induced by oral contraceptive drugs. Alterations in carbohydrate metabolism was reported by Spellacy.⁶ Laragh and colleagues⁷ established a relationship between the institution of oral contraceptive regimens and the development or enhancement of high blood pressure in 8 of 11 patients. There have been many reports on monilial vaginitis associated with the agents. The British Medical Research Council has stated that "there can be no reasonable doubt" that some type of blocking of blood vessels by clots are associated with the use of oral contraceptives. In May, 1967, the Food and Drug Administration warned that these agents could prove harmful to young girls whose bone growth was not complete. No attempt is made here to review all the reports.

The adverse reactions to oral contraceptives have become so frequent and diverse

that it is now mandatory that practicing physicians ask any woman patient between the ages of 15 and 50 years whether or not she is taking birth control pills.

Review of Cases in a Private Practice

During a recent 12-month period in a limited private practice which did not include the prescription of oral contraceptives, 35 patients were seen because of conditions associated with the use of these drugs. Significantly, these patients had had to change physicians to seek relief. Also, in some cases it was necessary to recommend discontinuing the use of progestins in the management of these conditions.

The most common complication encountered was persistent monilial vulvovaginitis, which was present in ten cases. Next, there were nine cases of amenorrhea which had developed following discontinuation of oral contraceptives. In four patients the amenorrhea had persisted for two months; in two cases, for three months; and in three, for four months.

Two patients had become pregnant while taking contraceptive pills. Two patients had persistent intermenstrual spotting, and two had symmetrical enlargement of the uterus.

The following conditions were encountered in one case each:

1. Failure to menstruate after taking 20 pills (the patient had been taking progestins for seven years).
2. Infertility after discontinuing the pill.
3. Irregular bleeding during a course of progestins.
4. Prolonged bleeding while taking the pills.
5. Enlargement of the breasts.
6. Marked papillary cervicitis.
7. Prolonged bleeding after discontinuing the pills.
8. Condylomata acuminata.

One of the patients had been given oral contraceptives because of hypermenorrhea. This is now one of the conditions permitted by the FDA to be listed as an indication for oral contraceptive use. The patient was found to have a large submucous leiomyoma of the uterus.

Amenorrhea following discontinuation of

the pills is a bewildering experience for all concerned. The patient consults the doctor in the belief that she is pregnant. She is shocked to learn that she is not, and irked because she has not been told of this possible sequela. Some of these cases become infertility problems. Georgeanna Seegar Jones⁸ had to give clomiphene to four patients in an attempt to correct such a disorder.

Although there have been several surveys on acceptance of progestins for contraceptive purposes by obstetricians and gynecologists, information obtained from representatives of manufacturers of oral contraceptive drugs indicate that, in general, physicians vary somewhat in actual practice.¹ There are those who never prescribe the pill; (2) those who prescribe it only to women who have had four or five children; (3) those who prescribe it only after fertility has been proved;⁴ those who prescribe it only to married women; (5) those who prescribe to anyone on request.

Conclusion

There is mounting evidence of detrimental effects from the use of oral contraceptive drugs. Moreover, prescribing these drugs is really not a medical service, as no disease or pathological condition is being treated. Ad-

ministration of the pill is a reflection of the physician's comprehension of his purpose and his desire to please a healthy young woman.

The real purpose of the physician is to practice the science of medicine. This has to do with the prevention, diagnosis, and treatment of disease and disability. The role of the physician as a sociologist or as a panderer to the women in his practice, and the use of his franchise to administer drugs in these areas, are not intended by his license to practice medicine, and his actions in this respect should be examined.

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That worms exist in the human body, there can be no doubt; and that they must sometimes be considered as a disease, is equally certain: but this is not the case so often as people imagine. The idea that worms occasion many diseases, gives an opportunity to the professed worm doctors of imposing on the credulity of mankind, and doing much mischief. They find worms in every case, and liberally throw in their antidotes, which generally consist of strong drastic purges: I have known these given in delicate constitutions to the destruction of the patient, where there was not the least symptom of worms.—William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Philadelphia, Richard Folwell, 1799, p. 262.

Practical Aspects of Film Production

HUGH J. BURFORD, PH.D.* AND TOM WEBSTER†

This technological age has produced "hardware" for biomedical communication much faster than the "software" of skills in production and meaningful utilization have evolved. The 1967 conference on "Biomedical Communication: Problems and Resources" documents this need.¹ Also, Dr. L. L. Leveridge has recently been detailing the necessary steps in medical film production.^{2,3} Our own interest grew from the production of a pharmacology cardiovascular teaching film to be used in the basic sophomore medical course and to serve as a review for house officer and postgraduate education.‡ Therefore, this report is directed to the novice film-maker and should serve as a guide to the neophyte producer.

General Considerations

The following outline applies to the production of a 20-minute film:

1. *Time factor*: Before beginning, the producer must decide if he can invest 240 to 320 hours of time for production. This estimate is based on full-time work and will necessarily be increased under actual conditions.

2. *Outline of content*: The main ideas to be presented must be clearly understood and, more importantly, clearly presented. This may require a thorough search of the literature to make sure that the concepts being presented are not outdated. Once the principal ideas have been arranged by topics and irrelevancies eliminated, the outline should be revised with experts in the subject area to test the concepts for completeness and relevance to the goals of the film.

3. *Audio script-writing*: The dialogue should be written out completely, so that the maximum time for presentation of each concept as well as transitional material can be estimated.

4. *Working script*: The working script is composed in two columns, with the dialogue (audio script) on the right side of the page and the visual script on the left, appropriately adjacent to the audio. The visual script consists of a description of the visual field, with specific directions for the photographer concerning special features which need emphasis. Also, the time required for filming each visual field should be noted.

The working script should be revised with the help of the audio-visual personnel to determine the best way to present the material. For example:

a. The maximum amount of visual material which can be presented per frame is limited by the viewer's ability to comprehend the message. The best admonition is to *keep it simple* and avoid losing the viewer in details.

b. The plans for using animation, charts, tables, *etc.*, should be cleared with the artist and the cameraman. The cameraman should be the final judge as to the use of color and the texture of material for best results in filming.

c. At this point decide whether the film is to be shown on a 16-mm projector or reduced to 8 mm film loop units. A decision at this time will save money. If reduction from 16 to 8 mm is ultimately desired, the detail in the visual field should be much larger, and only about one-fourth as much information can be presented per 8 mm frame.

5. Advice in production should be solicited from specialty groups in the institution, such as the departments of surgery, histology, or the clinical staff for patient use, *etc.*

6. Finally, the cost of production should be considered. In our experience a 20-minute, 16-mm color film will cost in the vicinity of \$2,000, if a well organized and equipped department of audio-visual resources is available. The public health audio-visual

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‡"Cardiovascular Pharmacology," a teaching film produced by Hugh J. Burford and John E. Maines, Jr., with the cooperation of the Departments of Surgery and Audio-visual Resources, Bowman Gray School of Medicine. This film was produced under a grant from the National Fund for Medical Education, J. Max Little, principal investigator.

facility at Atlanta will give help in the absence of an institutional department.

Filming

Live sequences: The live sequences—surgery, polygraph recording, in which movement must be portrayed—can be filmed by carefully scheduling all participants, including the cameraman. The cameraman can work best from a simple visual script indicating the sequence of shots, visual content of each shot, and estimated time for filming each shot. As a rule, eliminate all unnecessary visual information from each shot in order to emphasize the main idea most forcefully.

Studio sequences—still shots and animation: Titles, charts, tables, etc., are usually filmed in the studio, where careful attention can be given to adequate lighting and simplified composition. Animation can be achieved most simply by using composite or overlay art work to give the impression of sequential development or movement. The technique involves shooting the developing scene, one frame at a time, in sequence. Animation is a time-consuming process for both artist and cameraman, and therefore an expensive one.

All studio filming should be done with the complete script in hand. The narrator can cue the cameraman for beginning and ending each shot to coincide with the narration during the film process. Animation requires knowledge of the actual time of narration, as this filming is done one frame at a time.

Technical Aspects

A good quality, 16-mm camera with a through-the-lens viewing system should be used—preferably an Arriflex 16. A camera of this quality is needed because of the critical focusing and framing that is necessary in making a technical movie. Parallax is too big a problem to overcome easily and consistently with a non-reflex movie camera.

Ektachrome commercial film, type 7255, should be used for the original film from which copies are to be made. This film should not be projected, as it lacks the necessary contrast for projection viewing

and has a soft emulsion that scratches easily. Kodachrome II provides the necessary contrast and therefore can be used when duplicate films are not required. We have found it wise to use Ektachrome 7255 film for all shots and have copies made, because one never knows when a scene will become of utmost importance later, when the value of the material suddenly changes. The film is the cheapest item in the overall cost of movie-making.

After the original has been processed and edited only to the extent of putting the shots in correct sequence, a one-lite work print is ordered. This is the cheapest color print available to work with. Some people order the work print in black and white, thus saving a few dollars by sacrificing color. Both the original film and the work print are edge-numbered by the laboratory making the work print. The work print is then edited by the producers and returned in its completed form to the laboratory, together with the original film, which is left untouched (For guides to editing, see below.)

The original film is then edited at the film laboratory to correspond to the work film, frame by frame, using the edge numbers that were applied to both films.

The audio portion of the movie should be recorded at a film laboratory having a good studio. The problem of synchronizing the sound track and visual record is too great to be tackled without the proper equipment—which is expensive. Also, the quality of sound is a primary concern, as will be shown later.

Eight-millimeter cartridge films are in their infancy; at present, therefore, 16-mm film should be used for all shots and reduced to 8 mm by a commercial laboratory. The use of 8-mm cartridges should be stabilized in two to five years. Then it will be possible to shoot the movie on 8-mm film and record the sound at the same time. The movie can then be projected with compatible machines. The 8 mm cartridge projectors being made by different companies today are not interchangeable, owing to differences in the location of the sound on the film. Commercial laboratories can place the sound

at the proper interval for the particular projector with which it will be used.

Editing

After filming, processing, and careful timing of the audio script, the editing process can begin. With the use of a simple film viewer and splicer, the number of frames corresponding exactly to the length of the audio script can be selected from the developed film. By knowing the speed of the projector, one can arrive at the number of frames being shown per unit time during the projection process. Sound speed is 24 frames per second. Care should be exercised to keep any sequential change in the visual record, such as occurs during animation, synchronized with the audio script.

It is important to allow enough time during the visual scenes to narrate the audio portion of the film. An excess of visual material is permissible; too little, however, requires rewriting the audio script to shorten it or refilming the visual sequence. It is more economical to "edit out" the excess visual material than it is to refilm some shots. Also, lighting conditions are nearly impossible to replicate so far as color rendition is concerned.

Synchronization of narration: The edited work print film should be projected at maximum size. During this projection the narrator should read the audio script over a sound system and two or three persons should listen for discrepancies between the visual and audio records. At this time such

discrepancies can be corrected and the narrative process and writing of the visual and audio portions of the movie can be completed.

Narration, Optical Sound and Printing Processes

The processes can be carried out only in a modern film laboratory with a good sound studio and support facilities (see technical section above). The narrator takes a copy of the work print to the laboratory and records the audio script on a magnetic voice tape, which is synchronized with the visual record on the master film copy. The uninitiated narrator will find that the audio system in the laboratory will record the slightest extraneous sounds, such as that of breathing, and he must therefore attempt to eliminate them as far as possible.

The film laboratory transfers the magnetic tape to an optical sound tract and then proceeds to join a copy of the original master film and the optical sound tract onto a release print to produce the finished movie.

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Though I do not remember to have seen one instance of a genuine consumption of the lungs cured by medicine, yet I have known a West India voyage to work wonders in that dreadful disorder.—William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines etc., Philadelphia, Richard Folwell, 1799, p. 131.

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LESSONS FROM BURN AUTOPSIES

Performing autopsies on burned patients presents problems in the present legal and emotional setting of such examinations. Because of the nature of burned skin, the autopsied body is difficult to close properly, and unless the family situation is such that a funeral without display of the remains is planned, the physician obtaining autopsy permission should be frank and make sure that the consent he gets is informed consent—that is, that the family understands that display will likely not be feasible.

Despite such obstacles, the burn treatment center at Brooke Army Hospital in

San Antonio has the remarkable autopsy percentage of 95%, examining 335 of the 352 patients who died between 1960 and 1967, on a service which had 1,473 patients admitted during those years. There has been a recent increase in admissions because of burns from phosphorus-containing explosives in the Vietnamese war.

In the *American Journal of Clinical Pathology* (52:1-13, July, 1969), Foley reports on the autopsy examinations mentioned above. He stresses that a proper autopsy on a burned patient must include transverse gross sectioning of the burn wound itself, for the leathery, dried surface may show no evidence of infective processes underneath. When these transverse cuts are made, one gets a three-dimensional picture of the wound, revealing characteristic hemorrhagic discoloration of subcutaneous fat which strongly suggests infection, although confirmation requires microscopic sections—the thermal injury itself may mimic infection. After the appearance of the transected surface is evaluated, proper sites for microbiological study may be selected.

In Foley's series, the patients were young, with a mean age of 24 years, and complicating illnesses were few, allowing a "pure" pathologic picture of burn effects. Sepsis remains the chief cause of death, although there has been a remarkable decline in the number of deaths from sepsis since the advent of topical antibacterial therapy in early 1964 (this subject was dealt with in the papers of Howell and Whitson, in this JOURNAL, July, 1968). Fungi have increasingly been found in the burn wounds since topical treatment came in, though they were present before. In most cases the fungi have merely colonized dead tissue, but occasionally viable tissues have been invaded. Infective phlebitis beginning in sites of cannulation has been recognized as an important problem through careful autopsy study of such sites, and resulting modifications of clinical procedures have reduced mortality from this source. Phlebitis rivals the burn wound itself as the source of fatal sepsis at the present time.

Respiratory complications have been as-

sociated with an increasing percentage of deaths, but this may be more the effect of a reduction in sepsis from the burn site. The increase due to pneumonia has occurred mainly in patients with burns covering more than 50% of the total body surface, and there has been a change in the microscopic appearance of the lungs, the features suggesting oxygen toxicity.

This brief sampling of Foley's report, interesting in itself, also indicates the valuable information that can be gotten by an interested person from an unpromising source of material. The close association of the pathologists with the clinicians on the Brooke burn service—the two groups make rounds together—no doubt is a great stimulus to both parties, and inevitably results in quick transfer of information between them to the benefit of the patient, as in the matter of venous infections. Perhaps a lack of such close association is responsible for the troubles some institutions seem to have with autopsies, rather than anything intrinsic in the autopsy itself.

* * *

TIME SENSE AND SOCIAL CLASS

A group of psychiatrists, working at Johns Hopkins, decided to look into factors affecting one's subjective sense of time, as compared with society's sense of time represented by the clock (*Arch. Gen. Psychiat.* 21:1-14, July, 1969). Finding quite a disparity between test results from a group of ambulatory ophthalmology patients who were walking about with one eye covered (testing the effects of altered sensory stimulation) and a group of women recuperating

from abdominal hysterectomy (who were also part of the hospital routine for patients), they found worse performance for the latter group, to their surprise. One of the recuperating women gave them the clue they needed to go off on another lead. This was a Negro woman who said she knew it was a minute when the second hand of the clock came full circle, but she herself had no concept of a minute's time interval. Since the eye patients were chiefly middle class and up, and the hysterectomy patients from the lower socioeconomic classes, the psychiatrists decided to compare those two groups, using hospital employees as subjects. The lower class employees thought more time had gone by than had actually elapsed, and were less consistent in their estimates of elapsed time. The estimates of the upper class employees were clustered randomly around the true time interval. Race and sex did not influence the results, contrary to the expectations of foot-tapping husbands.

As authors Pollack, Ochberg and Meyer comment, awareness of differences in time perception may help a therapist in understanding the problems of a patient from the lower socioeconomic strata. Certainly complaints about the time sense of people in this group are frequent; the authors suggest that this difference might stem from the emptiness of the early lives of many of these people—with nothing special to do and no special place to go at a given time, they never had a chance to develop a time awareness that more fortunate people quietly develop. An intriguing thought—but how to explain teenagers' chronometric irresponsibility? That needs a study all its own.

At the beginning of a fever, the patient generally complains of great lassitude or weariness, and has no inclination to move. This evidently shows the propriety of keeping him easy, and, if possible, in bed.—William Buchan; *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines*, etc., Philadelphia, Richard Folwell, 1799, p. 110.

Bulletin Board

COMING MEETINGS

University of North Carolina School of Medicine, Continuing Education and the Department of Psychiatry: Review Seminar on Psychiatry in Medical Practice—Chapel Hill, Wednesdays, 1:30-3:00 p.m., October 15-December 10. (Registration, \$20).

Medical College of Virginia, Forty-first Annual McGuire Lecture Series—Richmond, October 23-24. McGuire Lecture: "Advances in Pathophysiology and Therapy of Skin Disease," by Eugene Van Scott, M.D., professor of dermatology, Temple University.

North Carolina Chapter, American Academy of Pediatrics and the North Carolina Pediatrics Society—The Carolina, Pinehurst, November 21-22.

Tennessee Valley Medical Assembly—Chattanooga, October, 13, 14.

NEWS NOTES FROM THE

UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

Dr. Ernest A. Pearson, Jr. of Raleigh, a leading Tar Heel public health official was inducted into the University of North Carolina chapter of Delta Omega here in July.

He is director of the Dental Health Division of the State Board of Health. He was recognized by the public health honorary society for his contributions to the field on both state and national levels. He is current president of the N. C. Public Health Association.

* * *

Dentists from across the United States and from as far away as Saudi Arabia took part in the University of North Carolina School of Dentistry's postgraduate course in dentistry for children.

The five-day course was the last of three such courses offered by the School of Dentistry in July. Enrollment in each course was limited to 15 persons.

* * *

Dr. Cecil G. Sheps of the University of North Carolina has been appointed a member of the National Research Council to represent the American Public Health Association in the National Academy of Sciences' medical division.

Dr. Sheps is director of the Center for Health Services Research at the University here.

Before he joined the UNC faculty in January of this year, Dr. Sheps was general director of Beth Israel Medical Center in New York City.

The Institute which Dr. Sheps heads was officially established in 1968 with a \$2.5 million, five-year federal research grant. The role of the Institute is to conduct major research into the delivery of health care services in community settings. Its chief focus is that of improving existing practices and experimenting with new ideas for delivering health services to people in their home towns.

* * *

The Department of Surgery of the University of

North Carolina has announced the appointment of Dr. Robert Stanley Mandel as an instructor in surgery. He will be associated with the Division of General Surgery (Vascular-Traumatic) and will be active in the transplantation program.

Dr. Mandel has recently been associated with the Department of Surgery of the University of Virginia in Charlottesville, Va.

Dr. Mandel was born in New York City, graduated from Columbia University in 1958, and the University of Virginia School of Medicine in 1962. He was an intern and assistant resident in surgery at Duke University in Durham, completing his surgical training at the University of Virginia in Charlottesville. He also obtained a Master of Science in Surgery in 1967 from the University of Virginia.

He spent a year in the laboratory during 1966 and 1967, investigating methods for preservation of organs for use in transplantation. His work has been published in a thesis and in several scientific journals.

* * *

The University of North Carolina Chapter of Delta Omega Society inducted 32 members at its annual banquet here in July.

Each year students are selected to membership in Delta Omega based on academic achievement in graduate public health study and potential contribution to the field. In addition, outstanding faculty members and alumni are elected into the honorary fraternity annually.

Initiated into the Society were 26 UNC Public Health graduate students, five UNC faculty members, and one UNC alumnus.

* * *

Dr. Robert DeVane Croom III, a chief resident in the Department of Surgery at the University of North Carolina School of Medicine, has been selected as the first recipient of the Nathan A. Womack Fellowship in Surgery.

This fellowship was created by friends, associates and students of Dr. Nathan A. Womack, the first chairman of the Department of Surgery, in recognition of Dr. Womack's leadership in surgery and medical education. Dr. Womack is a Kenan Professor and Chairman Emeritus of the Department of Surgery.

The fellowship is awarded on an annual basis to a member of the surgical house staff who embodies the high principles and ideals of surgical excellence so well exemplified by Dr. Womack.

* * *

Four grants totaling \$168,299 have been awarded to the University of North Carolina School of Medicine's Department of Pharmacology.

The National Institute of Mental Health has awarded two grants of \$44,441 and \$47,858 for studies on alcohol and marijuana. Dr. Fred W. Ellis, professor of pharmacology, will undertake research entitled "Chronic Intake and Withdrawal of Alcohol in Animals." The second grant will be used by Dr. Louis Harris for a study of the "Pharmacology of Trans-tetrahydrocannabinol," the pure active ingredient in marijuana.

Dr. William Pearlman will study "Steroid-Protein Interactions and Human Breast Cancer" and "Steroid-Protein Interactions in Serum and in Steroid Hormone-Responsive Tissues" under a \$50,000 award from the National Cancer Institute and a \$26,000 award by the National Science Foundation.

* * *

Dr. Louis Harris and Dr. Philip Hirsch, associate professors in the Department of Pharmacology at the University of North Carolina School of Medicine attended the Fourth International Congress on Pharmacology in Basel, Switzerland, July 14-18.

Dr. Harris presented two papers entitled "Bentazocine in the Adrenal Cortical Stress Response of Rats" and "Acetylcholine Turnover in Brain Slices: Effect of Narcotics and Narcotic Antagonists."

Dr. Hirsch also attended the Second International Symposium on Calcitonin and C Cells in London, July 21-24, where he presented a paper entitled "Thyrocalcitonin and Parathyroid Hormone in the Hamster."

* * *

The University of North Carolina is expanding its Medical School enrollment this fall from 75 to 85 entering freshman.

The announcement was made in a letter to Gov. Robert Scott from UNC Vice Chancellor for Health Sciences Dr. C. Arden Miller.

The increase by 10 students is coming a year ahead of a planned expansion set for the fall of 1970 which would have involved 25 new entering freshmen.

According to Dr. Miller's letter, "The number of qualified applicants from North Carolina this year exceeds our expectations. This led us to examine the possibility of advancing our expansion plans to take part of the increase a year early . . . in the fall of 1969."

Dr. Miller's letter continued, "With the assurance that new facilities and increased program support will be available as the new students progress into the

higher levels of medical education, we believe that we can take 10 additional students this fall for an entering class of 85, and 15 more entering students in 1970 to achieve a class size of 100.

"All 10 additional students to whom we are issuing acceptances this fall are residents of North Carolina. The freshman class will have 88.3% of its students from the state."

* * *

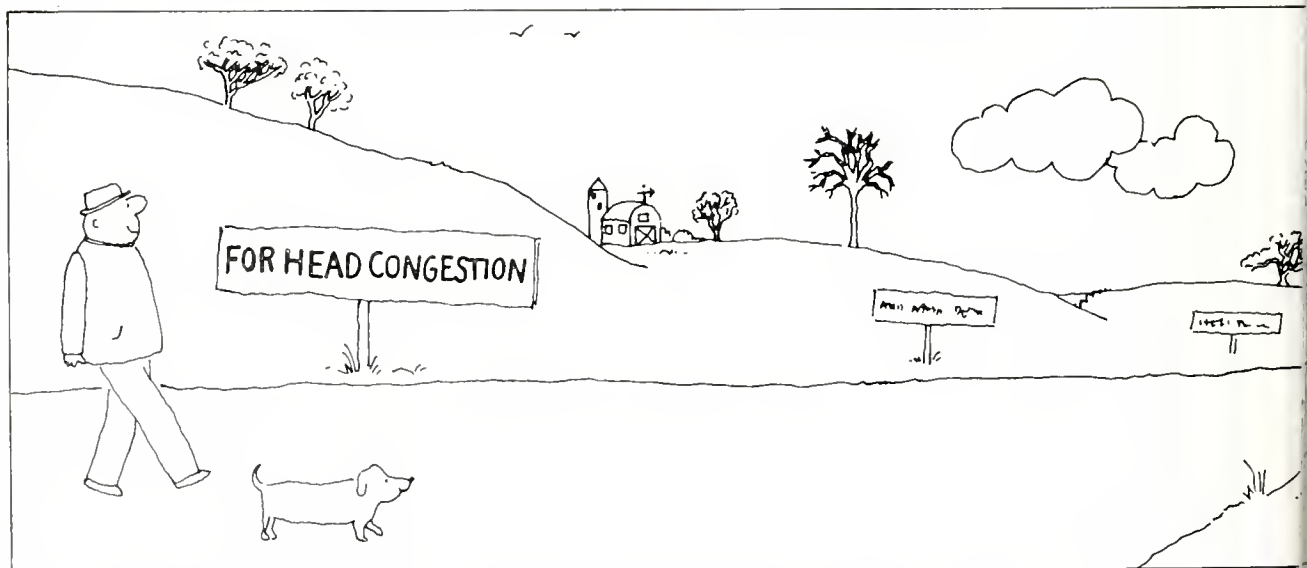
Five new Kenan Professors and three Alumni Distinguished Professors were appointed in July at the University of North Carolina here.

The professorships, recommended by UNC Chancellor J. Carlyle Sitterson and approved by President William C. Friday, were endorsed and approved by the Board of Trustees.

The Kenan Professors are Dr. Bernard Greenberg, chairman of the UNC School of Public Health's department of biostatistics and a pioneer in health research methods; Dr. Carl W. Gottschalk, professor of medicine and physiology who was cited in 1966 by "Modern Medicine" magazine for distinguished achievement in medicine; Dr. J. Logan Irvin, professor of biochemistry and a specialist in cancer research; Dr. Eugen Merzbacher, professor of physics and chairman of the division of natural sciences; and Dr. George B. Tindall, professor of history and author of the award winning book "The Emergence of the New South, 1913-1945."

New Alumni Distinguished Professors are Dr. F. Stuart Chapin, Jr., professor of city and regional planning and research director of the Center for Urban and Regional Studies; Dr. Lyle V. Jones, professor of psychology and director of the UNC psychometric laboratory; and Dr. Louis G. Welt, chairman of the UNC department of medicine, a specialist in kidney disease and president of the American Society of Nephrology.

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Two medical professors will be on leave next year. Ellis Lawrence Rolett, associate professor, began leave on August 1, to do research at the University of California at Los Angeles. Donald Douglas Weir, associate professor, will organize the rehabilitation center at the University of Iowa and St. Luke's Hospital for one year beginning Sept. 1.

Seven Medical School faculty have announced their resignation.

Anthony F. Bartholomay, professor of medicine and public health, resigned June 30, to accept a position at the Medical College of Ohio in Toledo. Christopher C. Wham III resigned July 31, to accept a position at the Medical College of Georgia. Richard M. ... resigned Aug. 31, to accept a position at the University of California.

Medical Professor Charles F. Zukoski resigned Aug. 30 to accept a position at the University of Arizona. ... M. Shingleton, associate professor of medicine, resigned July 31, to accept a position at the University of Alabama Medical Center. William G. Wysor, associate professor of medicine, resigned June 30 to enter private practice in Durham. Assistant Professor John T. Bellair, resigned June 30 to return to Australia.

Medical Assistant Professor Peter Hutchin resigned June 30, to accept a position at the University of California. John W. Madden, assistant professor, resigned June 31, to accept a position at the University of Arizona.

William O. Trier, assistant professor of medicine, resigned Aug. 31, to accept a position at the University of Arizona.

* * *

Twelve population students majoring in Public Health Administration at the University of North Carolina here served as field workers with nine county health departments in the state and with several statewide agencies.

These field assignments, which continued through mid-July, supplement study both at master's and doctoral levels.

A continuation of assignments begun during the spring semester, the field program is designed to prepare students for state, national and international responsibilities in family planning institutions.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY

Dr. James F. Toole, professor and chairman of the Department of Neurology at the Bowman Gray School of Medicine, this month begins a 10-month leave of absence during which time he will be visiting professor of neurology at the University of California at San Diego, La Jolla campus.

Toole, who is recognized nationally for his work in cerebrovascular disease, will take refresher courses in the basic sciences, prepare a text of clinical neurology, and do research in the neurology of human behavior.

"It is estimated that medical knowledge doubles every 10 years. I'm 20 years out of medical school, so it has quadrupled since I graduated," Toole said. "I have been unable to keep abreast of new developments in fields which relate to my areas of interest.

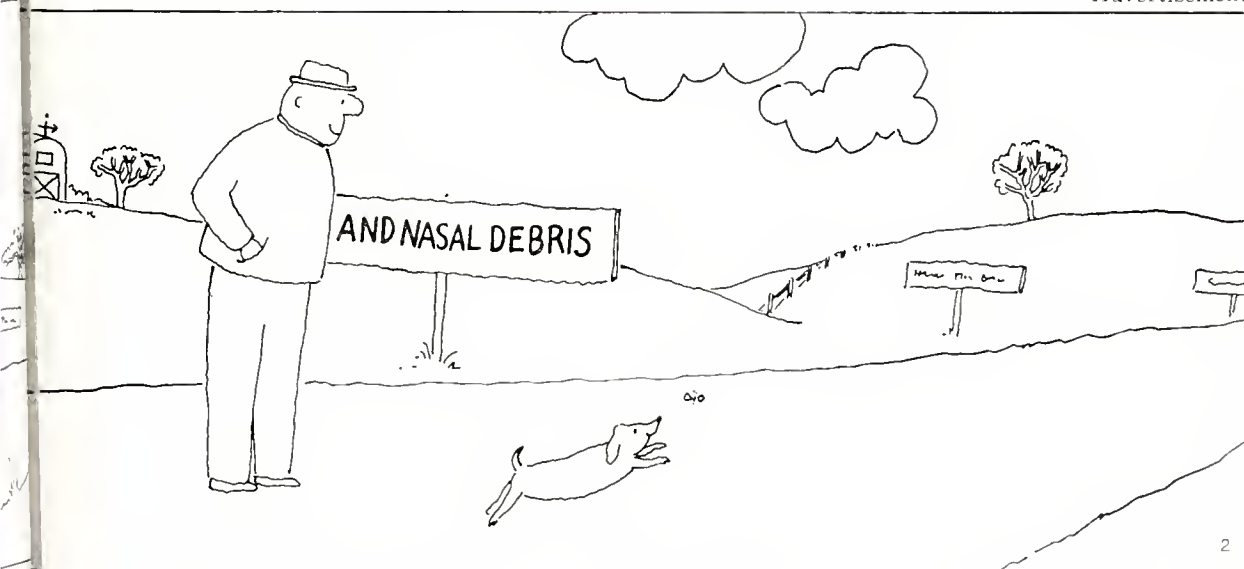
"Furthermore, medical students have been taught things in college and in the basic sciences which I haven't even heard about. I am going to study with them again and update myself," he said.

Toole hopes the 10 months will allow him time to broaden his horizons into the newer areas of the neural sciences, especially in neuropsychology, neuropharmacology and neurophysiology of behavior, so that upon his return to Bowman Gray he can stimulate further interest in these fields.

* * *

Four assistant professors and two instructors have

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been appointed to the faculty of the Bowman Gray School of Medicine.

The new faculty members are Dr. Lawrence R. DeChatelet, assistant professor of biochemistry; Dr. David L. Groves, assistant professor of microbiology; Dr. Ruth O'Neal, assistant professor of pediatrics; Dr. Larry A. Pearce, assistant professor of neurology; Dr. Bok Soo Kim, instructor in pathology; and Dr. Bill J. Kittrell, instructor in otolaryngology.

Pearce and Kittrell hold M.D. degrees from the Bowman Gray School of Medicine. DeChatelet holds the Ph.D. degree from Loyola University in Chicago, and Groves holds the M.D. and Ph.D. degrees from the University of Wisconsin.

Dr. O'Neal has been a member of the medical school's part-time faculty for the past 20 years, during which time she was in private practice in Winston-Salem. She will work primarily with the teaching and patient-care programs of Reynolds Memorial Hospital, a community hospital with which the medical school began a cooperative program last year.

* * *

Dr. Carlos E. Rapela, professor of physiology, participated in a symposium on "Regulation of Blood Pressure" in July at the IX Latin American Congress of Physiological Sciences in Belo-Horizonte, Brazil. He presented a paper on "Control of Cerebral Circulation."

While in South America, Dr. Rapela served as a visiting lecturer at four universities in Brazil and Argentina.

* * *

Dr. Stephen H. Richardson, associate professor of microbiology, has received a two-year appointment to the Cholera Panel of the U. S.-Japan Program. The purpose of the program, which is sponsored by the National Institute of Allergy and Infectious Diseases, is to advance the knowledge of selected diseases of importance to the people of Asia.

Each disease category panel is responsible for establishing specific research goals and guidelines and coordinating these with counterpart Japanese panels.

Richardson has spent the past six months at the University of California at Los Angeles where he has been engaged in special study of microbial genetics.

* * *

Two professors of neurosurgery, Dr. Eben Alexander, Jr. and Dr. Courtland H. Davis, Jr., participated in the Section on Neurosurgery at the annual meeting of the American Medical Association July 16-17 in New York City.

Alexander served as chairman of the section, which is in a two-year testing period to determine whether it will be made a permanent part of future AMA programs.

Davis presented a paper entitled "Nonoperative Management of the Patient with Head Injury (Cerebral Contusion)" during the program on "Emergency Care of Neurosurgical Patients."

* * *

Dr. A. Robert Cordell, associate professor of surgery, and Dr. Michael A. Stein, assistant in surgery, presented a paper on "Cardiac Arrhythmias and Left Ventricular Efficiency Following Experimental Myocardial Infarction and Infarctectomy" at the meeting of the International Cardiovascular Society in New York July 9-12.

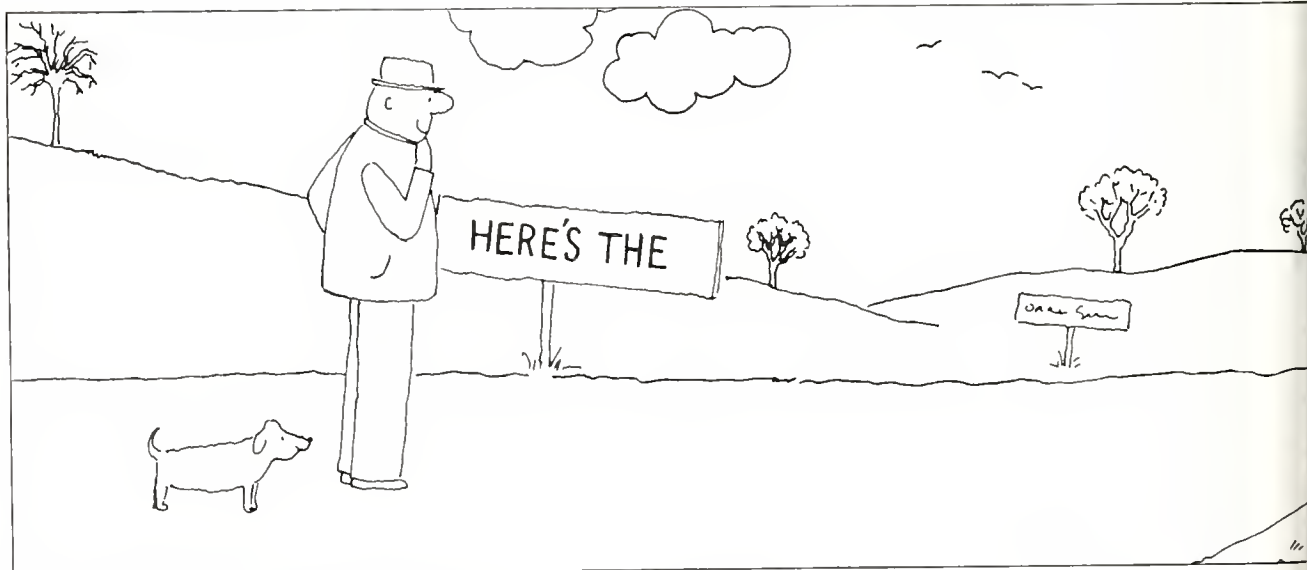
* * *

Dr. Clark E. Vincent, professor of sociology and director of the Behavioral Sciences Center, recently presented two papers at the 20th annual Assembly of the Florida Academy of General Practice. His papers were on "Unmarried Mothers—Clinical Management" and "Physician as Consultant in Marital and Sexual Stress."

* * *

Dr. D. Louise Odor, associate professor of anatomy, participated in a seminar June 30 in the Department of

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Biological Structure at the University of Washington in Seattle. Her topic was "The Fimbria of the Oviduct. The Effect of Long-termed Ovariectomy and Subsequent Estrogen Administration."

She was one of 40 persons invited to the Blastocyst Conference July 10-13 at Lake Wilderness, Washington. She will participate in the writing of a chapter entitled "The Epilogue" which summarizes the conference and points out unsolved areas of research.

* * *

Dr. Robert H. Coombs, associate professor of sociology, has been appointed to the Board of Editors of "The Family Coordinator: Journal of Education, Counseling and Services."

* * *

Dr. Quentin N. Myrvik, professor of microbiology, has been appointed to a four-year term on the Infective Agents Research Evaluation Committee of the Veterans Administration. The committee reviews grant applications of investigations within the Veterans Administration hospital system.

* * *

Charles F. Alexander III, a senior from Oshkosh, Wis., has been named editor of the 1969 edition of "Research and Reviews," the annual student scientific publication. The journal, which will be published in December, will contain research papers and dissertations written by students who were graduated in June.

Other members of the editorial staff of the Journal are Edward H. Karotkin of West Hartford, Conn., and James H. DeWeerd Jr. of Rochester, Minn.

* * *

William J. Casey Jr. of Arlington Heights, Ill., has been elected president of the senior medical class. Other new officers are Haywood N. Hill of Atlanta, Ga., vice president; Mrs. Carolyn Black Ferree of Liberty, secretary; and P. Samuel Pegram Jr. of Greensboro, treasurer.

* * *

Dr. Kenneth P. Chepenik, instructor in anatomy,

presented a paper on "Energy Metabolism in Normal and Abnormal Rat Embryos" at the ninth annual meeting of The Teratology Society at Crystal Mountain, Washington in July.

* * *

Dr. Thomas B. Clarkson Jr., professor and chairman, Department of Laboratory Animal Medicine, presented a paper at the symposium on "Animal Models in Biomedical Research" at the AVMA meeting July 13-16 in Minneapolis, Minn. The paper, co-authored by Dr. Billy C. Bullock and Dr. Noel D. M. Lechner, assistant professors of laboratory animal medicine, was on "Animal Models of Atherosclerosis."

* * *

Dr. Richard T. Myers, professor and chairman, Department of Surgery, participated in the program on "Dialogue and Dilemma: Medicine and Religion" Sept. 8-9 at the University of North Carolina at Chapel Hill. Dr. Myers spoke on "Organ Transplantation—Extension of Life?"

NEWS NOTES FROM THE DUKE UNIVERSITY MEDICAL CENTER

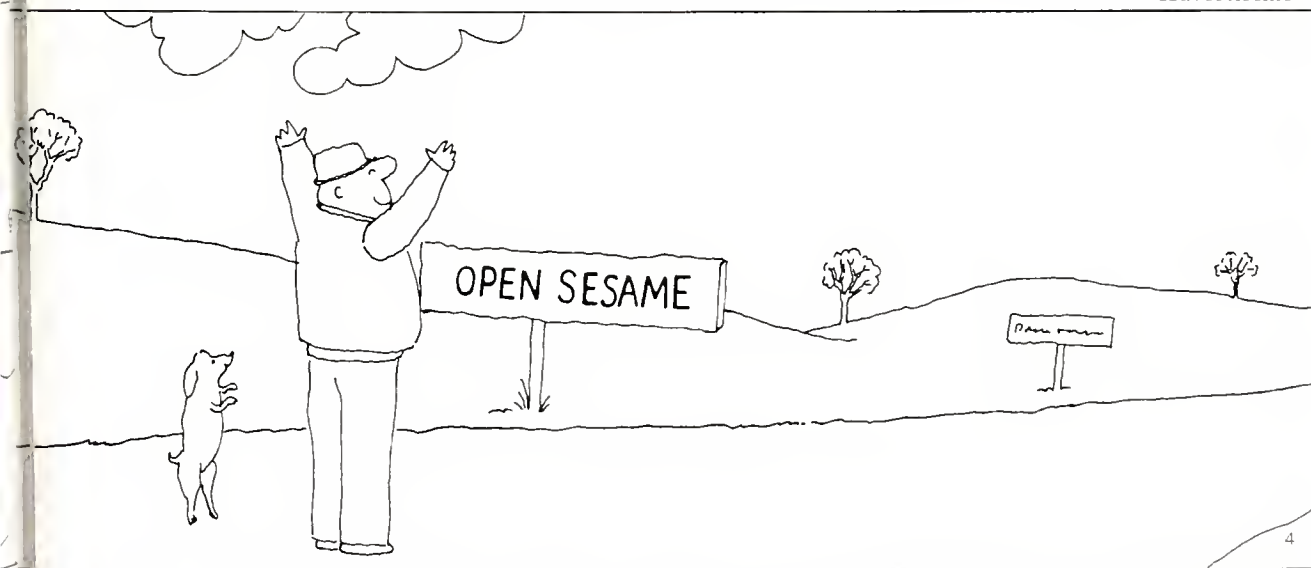
Dr. Saul Boyarsky has assumed duties as director of rehabilitation at the Duke University Medical Center.

Boyarsky, professor of urology, assistant professor of physiology and director of urologic research, will oversee the operation of Duke's new outpatient facility, Rehabilitation II, now under construction at the northwest corner of Erwin Road and Trent Drive.

A native of Burlington, Vt., he earned his M.D. degree from the College of Medicine at Vermont in 1946 and then served an internship at Johns Hopkins Hospital in Baltimore. Prior to his appointment at Duke, he was associate professor of urology at the Albert Einstein College of Medicine in New York.

Dr. Boyarsky presently also serves as chief of urology at the Durham Veterans Administration Hospital, and as a consultant in urology to Watts and

Advertisements



Lincoln hospitals in Durham and to the VA Hospital in Oteen, N. C. This year he is chairman of the urology section of the Southern Medical Association.

The new director is the author of 125 scientific articles and abstracts and has been involved in the publication of numerous books and monographs.

* * *

A stately structure of Gothic design, made of Hillsborough stone and precast concrete in the tradition of Duke Medical Center, will open soon to complete the second phase of a three-part plan to provide comprehensive rehabilitation care, at Duke.

Known as Rehabilitation II, the two-story edifice is situated on Erwin Road near Duke's School of Nursing. It houses a variety of medical specialists who will employ the "team approach" in treating the severely disabled, ill, and injured patients.

Physical and occupational therapists, vocational counselors, psychologists, and social workers will use their collective skills toward returning these patients to a productive role in society.

The center also will serve as a place where physicians can treat patients with injuries resulting from automobile accidents and burns, children with serious birth defects, the emotionally disturbed, and stroke patients.

* * *

The department of medicine at Duke University Medical Center has promoted two men to the position of associate professor. Both were formerly assistant professors in the department.

Dr. Thomas E. Andreoli, a native of New York, will retain the title of assistant professor of physiology along with his new post as associate professor of medicine.

Andreoli came to Duke as an intern in 1960 after completing his B.A. degree at St. Vincent College and his M.D. at Georgetown University.

Also appointed associate professor of medicine was

Dr. Irwin A. Brody, a graduate of Princeton University. Brody earned his M.D. degree in 1956 from the University of Pennsylvania School of Medicine and came to Duke as an intern in medicine in 1957.

* * *

Appointed associate professor in the department was Dr. Thomas S. Harle, formerly associate professor of radiology at Baylor University College of Medicine in Houston.

Dr. Irwin S. Johnsrude, a native of Calcutta, India was promoted to associate professor. He was formerly an assistant professor in the department.

Also promoted to associate professor of radiology was Dr. Reed P. Rice, assistant professor since 1961. He came to Duke from a post at the University of North Carolina at Chapel Hill.

* * *

Dr. Robert L. Hill, professor of biochemistry at Duke University Medical Center, has succeeded Dr. Philip Handler as chairman of the Duke Department of Biochemistry-Genetics.

Handler, chairman since 1950, left Duke to begin a six-year term as president of the National Academy of Sciences.

Appointed to the Duke staff in 1961 as an associate professor, Hill was named professor of biochemistry in 1965. He had previously served as research instructor, assistant research professor and associate research professor in biochemistry at the University of Utah.

Hill's main field of research is protein chemistry with emphasis on the relationship between the structure and function of proteins, in particular, enzyme immunoglobulins and lactose synthetase. He is currently working on research projects sponsored by the National Institute of Health and the National Science Foundation.

A member of the American Society of Biological Chemists, he has held a position on the society's Educational Affairs Committee and is presently a member

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ber of the Council and chairman of the Procedures Committee.

From 1964 until this year, Hill served as a member of the editorial board of the Archives of Biochemistry and Biophysics and is now a member of the board of the Journal of Biological Chemistry.

He has just completed a term as chairman of the Biochemistry Training Committee of the National Institutes of Health and is currently chairman of the Biochemistry Test Committee of the National Board of Medical Examiners.

AMERICAN MEDICAL ASSOCIATION

The Medical Society of the State of North Carolina, in cooperation with the American Medical Association is cosponsoring a program of seminars and a lecture in nutrition in seven, and possibly eight, universities in the state during the 1969-1970 academic year. The AMA Council on Foods and Nutrition initiated this program in the fall of 1964. It is being carried out on a regional basis with several distinguished lecturers participating.

The lectures are designed to stimulate undergraduate students to consider careers in the health sciences, as well as to inform the audience of recent developments in the field of nutrition.

A total of 55 lectures are being scheduled in an eleven-state area which includes Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia and West Virginia.

Dr. Munsey S. Wheby, Associate Professor of Medicine at the University of Virginia School of Medicine in Charlottesville, will speak on "Iron in Human Nutrition" at the following schools:

High Point College in High Point

Monday, October 6

Appalachian State University in Boone

Tuesday, October 7

Dr. John A. Owen, Associate Professor, Department of Internal Medicine at the University of Virginia, School of Medicine at Charlottesville, will speak on "Obesity: The Nutritional Paradox of America" at the following schools:

University of North Carolina in Greensboro

Thursday, October 23

East Carolina University in Greenville

Friday, October 24

Dr. James P. Carter, Assistant Professor of Nutrition at Vanderbilt University School of Medicine, Nashville, Tennessee, will speak on "Hunger in America and Hunger Worldwide" at the following school:

North Carolina Agricultural and Technical State University in Greensboro

Tuesday, November 11

Dr. Richard C. Bozian, Associate Professor of Medicine, Director, Division of Nutrition at the University of Cincinnati, will speak on "Nutrition, Genetics and Disease—Adaptive Responses in Man" at the following schools:

Lenoir Rhyne College in Hickory

Tuesday, November 18

Western Carolina University in Cullowhee

Wednesday, April 15, 1970

NORTH CAROLINA STATE BOARD OF HEALTH

After 50 years of Health Director of Robeson County, Dr. Eugene Ramsey Hardin retired on June 30.

In September, 1919, when Dr. Hardin started, Robeson county had a population of more than 50,000 people divided among three races. The maternal and infant mortality rate was very high—as were deaths from infectious and contagious diseases.

Typhoid fever has now become a rare disease in Robeson County. The last case of diphtheria was reported in 1959. No smallpox has been reported since 1931. Tuberculosis Control has materially decreased—

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deaths and cases. The county has one of the outstanding prenatal clinics in the State. Pellagra, which was one of the big problems when Dr. Hardin came to the county is now almost an unknown disease. The more virulent problems of hookworms are gone though hookworms are still being fought. Preschool clinics held over the years have made it possible for healthier children to enter the first grade.

Robeson County, under Dr. Hardin's leadership through these 50 years, has provided a kaleidoscope of health problems and progress such as North Carolina has experienced state-wide. In many areas of health the county has provided training for staff and students of public health from other parts of the state and even from foreign countries.

Robeson County Health Department received the Merit Award of the North Carolina Public Health Association in 1958. Dr. Hardin was given the Rankin Award by this Association in 1963. He has served as president of the Robeson County Medical Society and of the N. C. Public Health Association.

Commenting on the excellent record Dr. Hardin has made, Dr. Jacob Koomen, State Health Director, said: "Rarely in any field of endeavor does one find a person who combines the professional competence and leadership to do such an outstanding job as Dr. Hardin has done in Robeson County and for the almost unbelievable period of 50 years."

N. C. MEDICAL OFFICER HONORED

One of few medical men to receive the Distinguished Flying Cross, Doctor (Captain) Edward V. Hudson, son of Mr. and Mrs. E. V. Hudson, 3410 Gladstone St., Winston-Salem, was presented the decoration at Ubon Royal Thai AFB, Thailand.

The U. S. Air Force flight surgeon, who has since completed his Southeast Asia tour, accompanied air crews of the 8th Tactical Fighter Wing on F-4 Phantom fighter-bomber missions as part of his job to learn first hand the stresses and experiences encountered by the men he served. During his tour, Dr. Hudson qualified as a systems operator on the Mach 2 Phantom and was cited for extraordinary achievement during aerial flight.

The physician graduated from Cramerton (N. C.) High School in 1954 and attended Gardner Webb Junior College in Boiling Springs, N. C. He received his B.S. degree in science in 1958 from Wake Forest University and graduated from Bowman Gray School of Medicine in 1962. Presenting the medal was Colonel Donald N. Stanfield, wing commander.

For the first time since the old-time apothecary faded from the American scene, a pharmacy concept has been developed that puts the "drugs" back into drugstores and eliminates toasters, momma dolls, and garden hoses.

NEW MEMBERS OF THE STATE SOCIETY

- Jerry Miller Petty, MS, 1012 Kings Drive, Charlotte, N. C. 28207
- James C. Coffey, M. D., GP, 130 N. Main Street, Salisbury, N. C. 28144
- Henry Gerard Hartzog, III, M.D., S, 4516 Gates Street, Raleigh, N. C. 27609
- Deysy Martinez Klain, M.D., ANES, 534 Lansdown Road, Charlotte, N. C. 28211
- Neil Patrick Mitchell, M.D., 24 Wisteria Drive, Asheville, N. C. 28804
- Arthur Shermon Morris, Jr., OBGYN, 21 Edwin Place, Asheville, N. C.
- John William Neal, M.D., GP, (Renewal) Main Street, Gibson, N. C. 28343
- Grady Edwin Preece, M.D., OR, 5200 Lincrest Place, Charlotte, N. C. 28211
- Jack P. McDaniel, (Renewal) 1256 Fort Bragg Drive, Fayetteville, N. C. 28304
- Harold Winfield Glascock, Jr., M.D., GP, Dorothea Dix Hospital, Raleigh, N. C.
- George R. Grant, Jr., M.D., 3047 Essex Circle, Raleigh, N. C. 27608
- Jeff Zeigler Brooker, M.D., 3417 Timmerman Place, Camp Lejeune, N. C. 28542
- Lawrence McGilbra Cutchin, M.D., I, 600 St. Patrick St., Tarboro, N. C. 27886
- Earl Wingate Parker, M.D., OBGYN, Tarboro Medical Clinic, Tarboro, N. C. 27886
- Johnnie L. Gallemore, Jr., M.D., Box 2995, Duke University, Durham 27706
- Henry Geroch, M.D., Northwoods Plaza, Jacksonville 23540
- Albert Arthur Bechtoldt, Jr., M.D., Anex, D-4 Camelot Apartments, Chapel Hill 27514
- Liam Noel Daly, M.D., P, N. C. Memorial Hospital, Chapel Hill, N. C. 27514
- Peter Russell Young, M.D., S, 1309 N. Elm St., Greensboro
- Clement Duchan Grandy, M.D., S, 1005 Crete Street, Durham 27705
- Frank S. Johnston, Jr., M.D., I, UNC, Chapel Hill 27514
- Eugene Michael Bozyski, M.D., I, N. C. Memorial Hospital, Chapel Hill 27514
- William Plexico Hood, Jr., M.D., I, N. C. Memorial Hospital, Chapel Hill 27514
- Charles Coleman Mehegan, M.D., N, N. C. Memorial Hospital, Chapel Hill 27514
- Carl Glenn Pickard, Jr., M.D., I, N. C. Memorial Hospital, Chapel Hill 27514
- Robert Allan Shaw, M.D., GP, N. C. Memorial Hospital, Chapel Hill 27514
- Hubert Ashley Royster, Jr., M.D., Pd, Umstead Rd., Route 2, Box 101, Durham 27705
- Benjamin Cureton Bowen M.D., GP, 644 Cherry Street, Statesville 28677
- B. E. Dunlap, M.D., GP, 709 W. End Ave., Statesville 28677
- Margaret J. Willhide, M.D., Pd, 644 Cherry St., Statesville 28677

Michael Eugene McLeod, M.D., I, 4007 Deepwood Circle, Forest Hills, Durham 27707

Joseph G. Springer, M.D., IND, 108 Devonway, Eden, 27288

Robert Samuel Gilgor, M.D., D, 2502 Vineyard St., Durham 27707

Elizabeth Mayrand, M.D., Path, P. O. Box 127, Advance 27006

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James Owen Fridley, M.D., 2351 Champion Court, Raleigh 27606

Lloyd Mather Wilcox, Jr., M.D., 201-G, Taylor Street, Raleigh 27607

NATIONAL CANCER INSTITUTE

A major new Human Histocompatibility Typing Center, established by the NIH National Cancer Institute to facilitate transplantation of organs and matched blood components to cancer patients, recently began operations.

The center analyzes tissue samples and computer-stores information on tissue types so that it will be possible to locate compatible donors whenever NCI patients require white blood cell or blood platelet transfusions, or bone marrow transplants. By facilitating the testing of cell fractions, the center will also open the way to large-scale preparation of special proteins called transplantation antigens which, in the future, may be administered to permit effective transplantation of unmatched tissue and organs.

Under a contract awarded to Microbiological Associates, Inc., a biomedical research firm in Bethesda, Maryland, the center will conduct cell typing tests similar in concept to blood typing tests. The tests will identify transplantation antigens present in an individual's tissue. It is the presence of foreign transplantation antigens on transplanted tissue that causes the rejection of donor organs and tissues.

NATIONAL INSTITUTES OF HEALTH

The cooperation of physicians is requested in the referral of patients for studies of hereditary angioneurotic edema being conducted by the National Institute of Allergy and Infectious Diseases at the Clinical Center, National Institutes of Health, Bethesda, Maryland.

Referrals of patients with proven or suspected hereditary angioneurotic edema are needed. Selected patients with a history typical of angioneurotic edema but with negative family histories will be studied.

Physicians interested in having their patients considered for admission to these studies may address: Michael M. Frank, M.D., or John S. Sargent, M.D., Clinical Center, Room 11-N-104, National Institutes of Health, Bethesda, Maryland 20014.

Referrals of patients with either chronic or cyclic neutropenia are also needed for study. Studies will be performed to determine the life span, cultural characteristics, metabolic, and phagocytic function of granulocytes. Following this, attempts at therapy will be made.

Physicians interested in having their patients considered for admission to these studies may address: Sheldon M. Wolff, M.D., or David C. Dale, M.D., Clinical Center, Room 11-N-232, National Institutes of Health, Bethesda, Maryland 20014.

NATIONAL EASTER SEAL SOCIETY FOR CRIPPLED CHILDREN AND ADULTS

The effects of oxygen deprivation on the infant before birth, the responses of brain-damaged children to teachers' techniques, and new methods for treating hydrocephalus (enlarged head) are three of eight new grants made by the Easter Seal Research Foundation at its May meeting.

The Foundation also made funds available for research into the biochemical changes that take place during various kinds of exercise as a basis for new designs for braces for handicapped persons. The locomotive patterns of the hemiplegic (one-sided paralysis), integrated camping for handicapped children with able-bodied children, new screening techniques to discover heart defects, and a study of professional and client viewpoints on rehabilitation problems also received grants.

Driving Skills of Senior Motorists

The results of a nationwide study into the driving records of senior motorists may well catapult the over-65 driver to a respected place on the highway and make his current reputation as a "hazard" a myth of the past.

A report on the accident involvement of the senior driver, released by the University of Denver College of Law, is so favorable to the senior motorist that Judge Sherman G. Finesilver, head of the study team, believes it "will be pivotal in refuting current popular thinking about older drivers." In the 31 jurisdictions for which data were available, senior drivers (persons age 65 and over) averaged 37 per-

cent fewer accidents than would exist if their proportion of accidents were in direct ratio to their proportion of the driving population.

Although senior drivers represented 7.4 percent of all drivers in the states surveyed, they were involved in only 4.8 percent of all accidents in these states. They averaged lowest of all age groups in frequency of injury-producing accidents and 40 percent below their proportionate share of the driving population.

Judge Finesilver expressed the opinion that "the senior driver has been made a scapegoat. The widespread beliefs that the older motorist is a 'nuisance' or a 'hazard' may not be justified." He concluded that "these findings should raise a beacon of hope for curing a profound inequity: namely, the gross underestimation of the senior driver. His license has been jeopardized, his insurance at times curtailed or adversely affected, and his abilities almost universally questioned. But now it becomes increasingly apparent that the senior driver is not only a good risk, but often may be among the safest motorists on the highway."

—from *More Life For Your Years*, 5/69

Council On Family Health Aids Elderly Through Home Safety Program

The Council on Family Health, organized and supported by members of the drug industry, is engaged in a nationwide public service campaign to help reduce home accidents to the elderly. Dr. Howard A. Prentice, president of the Council, told the 88th annual meeting of the Proprietary Association recently. "Elderly persons are involved in more fatal home accidents than any other age segment of our society," Dr. Prentice said.

Dr. Prentice told the audience that more than 3,000 program kits containing speeches and illustrated materials have been provided to groups of senior citizens throughout the nation.

The kits were developed in cooperation with the U. S. Public Health Service and distributed through the American Association of Retired Persons and the National Retired Teachers Association.

Dr. Prentice reported that a 30-second color television spot on "Safety with Medicines" had been requested for public service programming by more than 300 television stations throughout the nation so far this year.

Space Flight Results in New Hospital

Spacelabs, Inc., Van Nuys, California, prime contractor for the medical instrumentation on Apollo VIII, helped open a new chapter in the ability to monitor the vital functions of man consistently over prolonged periods of time at great distances. During the entire flight to the moon and back, there were no interruptions in the bio-medical signals, and no adjustments were required. The system in no way interfered with the many complex tasks carried on by the astronauts.

This feat is especially significant to the medical field since it indicates what will soon be possible in providing better care for ambulatory coronary patients. As a result of their space research, Spacelabs, Inc., has developed a new telemetry system for the general medical field.

The system operates on the IRIG band which will eliminate interference problems encountered in previous hospital telemetry units. A crystal control is used so no tuning or adjustments are required. The cardi-tachometer and receiver are combined in one compact, highly reliable unit. Spacelabs' new telemetry system is also compatible with existing monitoring display units used in many hospitals for coronary care.

Book Reviews

More Than Medicine. By Paul F. Whitaker, M.D.
Price, \$3.50. New York: The Carlton Press, 1969.

This book of verse offers not only some excellent reading for the physician, but also gives him a readily available therapeutic aid for some of his patients. The author is Dr. Paul F. Whitaker of Kinston, North Carolina. A former Governor of the College, he was elected a Master in 1964. His interests have ranged widely, but have been most notable in developing close relationships between Internal Medicine and Psychiatry. Thus, he has been an associate professor of internal medicine and consultant in psychiatry in medical practice at the University of North Carolina School of Medicine.

Like medicine, poetry is a creative art with multiple facets and possibilities. Many physicians have utilized poetry in treatment, and certainly many physicians have written poetry over the long march of time. However, it is only in recent years that poetry has begun to receive any appreciable attention as a possible therapeutic agent in medical and psychiatric literature.

Physicians, like their patients and all human beings, think on both a conscious and an unconscious level, and perhaps those who have utilized poetry in therapy have done so more or less unconsciously. Perhaps this explains the paucity of the literature on the subject.

Poetry therapy has received no attention in the curricula of medical schools. In May, 1968, Dr. Whitaker presented a lecture to medical students in a course in Human Ecology at the University of North Carolina School of Medicine in Chapel Hill, North Carolina. He reports interest of the students in the subject was apparent. In this lecture he illustrated how he had prescribed poetry to some of his patients. The following titles, pertaining to medical subjects, give a good idea of its medical connotations and how one might use these in helping patients in a variety of life situations. We have read all of these unusual poems and recommend them strongly to our colleagues. Many are on a

great variety of subjects, as indicated by chapter headings such as: Personal Verse; Nature Verse; Risque Verse; Varied Verse; Psychological, Sociological, Laudatory and Spiritual Verse.

—Bulletin of the American College of Physicians

* * *

Morris Fishbein, M.D. By Dr. Morris Fishbein. 505 pages. Price \$10.00. New York: Doubleday & Company, 1969.

Morris Fishbein, M.D. is the autobiography of a man who has spent more than 50 years working for the public good. Born the eldest son of German immigrants in 1889, Morris Fishbein's parents wanted him to become a rabbi, but he became fascinated with medicine and entered a pioneer premedical course at the University of Chicago. Continuing his studies at Rush Medical College, he received his M.D. in 1912.

His career as a writer began when he turned down several lucrative assistantships and joined instead the American Medical Association as assistant editor of its *Journal*. From that point on, writing, editing, and speaking became his career. He has since lectured all over the world, written literally hundreds of newspaper and magazine articles, including his celebrated column, "Dr. Pepys Diary," and published more than a score of books.

For 37 years, he was one of the AMA's most articulate spokesmen on controversial medical issues. He vehemently denounced quackery and campaigned for more frank discussions of health problems, setting the example by using words like "testes" and "ovaries" in his writings and lectures.

Dr. Fishbein's life has been an interesting and active one. His work load is still staggering and yet he finds time to enjoy the opera, the theatre, and baseball. He has an astounding memory which has served him well in the writing of this book. Many of the times and places which he writes about will be remembered by the reader as he shares with Dr. Fishbein this warm recollection of his 80 years.

NATIONAL INSTITUTES OF HEALTH

The National Advisory Cancer Council believes that rapid new gains against cancer through the sophisticated approaches of modern biomedical science will require a nationwide network of centers combining research, medical education, and patient care.

The Council's view is given in "Progress Against Cancer 1969," its third report to the public on the status and outlook of research and related efforts to control cancer through prevention, diagnosis, and treatment. The Council is advisory to the Director of the National Institutes of Health on policies and programs administered by the National Cancer Institute.

Continued improvement in the outlook for cancer patients has come mainly from advances in a few institutions staffed and equipped to integrate research and medical management, the report states. Less than two dozen institutions, situated mainly in the

northeast, approach the cancer center ideal, the report explains.

"Progress Against Cancer 1969" is devoted mainly to a review of progress in drug treatment. It reports that advances have been most encouraging in chemotherapy of leukemia with consequent lengthening of patient survival from one year to three years over the past four years.

"Progress Against Cancer 1969" can be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402. The price is \$1.50 a copy.

The Month In Washington

The American Medical Association questioned whether the Department of Health, Education and Welfare has the authority to issue its recent regulation limiting physicians' fees under medicare.

"We question whether the authority granted by the Congress embraces the promulgation of this regulation," Dr. Ernest B. Howard, executive vice president of the AMA, said in a letter to HEW.

"This regulation appears to reverse the roles of state and federal government established in the law itself."

The regulation limits most physicians' fees to the 75th percentile of the customary charge—the maximum customary fee of 75 percent of the physicians in the area.

After offering HEW the cooperation of the AMA in its efforts to contain rising medicare costs, Dr. Howard pointed out that the "comprehensive" care goal of the program could not be achieved "without substantial funding, both state and federal."

"Moreover, it has always been recognized that the intent of Title XIX (medicare), when adopted, was to dissolve any barriers which existed between medical care available to the medically indigent and other citizens," the AMA statement said.

"It also recognized that payment to physicians participating in the government program should be on the basis of reasonable charges—that is, usual charges of the physician within the customary range of charges for similar services in the community, so as to assure a broad range of participation by physicians in the program and eliminate one

(Continued on page 391)

Monthly Perinatal Mortality Report

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹; NORTH CAROLINA, JUNE 1969 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE					NONWHITE					COUNTY	WHITE					NONWHITE				
	Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries		Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries			Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries		
	June 1969	July 1968 - June 1969				June 1969	July 1968 - June 1969					June 1969	July 1968 - June 1969			June 1969	July 1968 - June 1969			June 1969	July 1968 - June 1969
NORTH CAROLINA	153	1921	67127	2.8	114	1391	27448	2.9													
ALAMANCE	4	38	1275	2.9	1	23	431	5.3	PENDER	6	131	4	2	150	2.7						
ALEXANDER		11	290	3.8		3	41	7.0	PERQUIMANS	1	49	3	5	50	10.0						
ALLFUGHANY		5	130	3.8			4	6.1	PERSON	6	248	10	185	10.0							
ANSON		7	162	4.3	1	16	282	5.7	PITT	1	19	728	3	28	623	17.0					
ASHE	1	14	297	4.7		1	3	3.0	POLK	5	148	4	30	30	3.0						
AVERY	2	9	230	3.9			4	7.0	RANDOLPH	3	23	1222	7	152	2.7						
BEAUFORT		11	386	10.7		14	221	6.0	RICHMOND	1	15	479	1	15	282	2.7					
BERTIE		2	110	1.8	2	11	269	4.0	ROBESON	1	19	621	8	61	1396	10.0					
BLADEN		7	247	7.0		11	201	4.4	ROCKINGHAM	2	33	997	1	24	405	2.7					
BRUNSWICK	2	6	293	2.0	1	5	148	3.4	ROWAN	2	29	1146	2	17	323	3.0					
BUNCOMBE	4	71	2112	3.3	1	9	261	3.4	RUTHERFORD		22	722	2	11	140	2.7					
BURKE	2	31	1020	3.0		4	86	4.6	SAMPSON	1	13	386	2	25	262	2.7					
CABARRUS	4	30	1061	2.8	2	13	283	4.6	SCOTLAND	1	12	107	1	10	240	1.9					
CALDWELL	2	37	1146	3.2	4	89	1000	8.9	STANLY	2	27	644	1	10	147	1.9					
CAMDEN		1	52	1.9		1	40	4.0	STOKES	1	12	325	1	1	47	1.9					
CARTERET	1	11	516	2.1	4	78	1000	7.8	SURRY	1	28	872	1	6	66	1.9					
CASWELL		6	169	3.5	2	10	177	5.6	SWAIN		2	98	1	1	52	1.9					
CATAWBA	4	38	1480	2.6	11	222	1000	22.2	TRANSYLVANIA	2	14	323	1	1	16	1.9					
CHATHAM		5	331	8.2	1	9	181	4.9	TYRRELL		29	1	1	3	70	1.9					
CHEROKEE		5	312	3.2	2	13	1000	1.3	UNION	2	24	667	8	307	3.1						
CHOWAN		1	87	1.1					VANCE		12	297	4	21	388	10.0					
CLAY		3	91	3.3		5	88	5.5	WARREN	6	78	3017	4	67	1385	10.0					
CLEVELAND	3	31	960	3.2	4	23	429	5.4	WASHINGTON	1	2	74	6	161	1.9						
COLUMBUS	1	13	573	2.3	2	13	345	3.8	WASHINGTON	1	6	115	7	160	6.0						
CRAVEN	2	30	1201	2.5	1	25	370	6.8	WATAUGA	1	14	351	3	3	3	1.9					
CUMBERLAND	6	117	3690	3.1	1	57	1309	4.3	WAYNE	3	21	1073	2	33	550	3.1					
CURRITUCK			55	0.5		2	33	3.3	WILKES	3	22	767	2	2	49	1.9					
DARE			112	1.1			10	1.0	WILSON	1	11	563	26	587	10.0						
DAVIDSON	3	41	1471	2.8	8	247	1000	24.7	YADKIN	2	14	374	2	2	32	1.9					
DAVIE		10	268	3.7	1	6	65	9.2	YANCEY	3	4	201	1	1	5	1.9					
DUPLIN		8	360	2.2	1	14	280	5.0	CITIES												
DURHAM	1	31	1457	2.1	7	37	881	4.1	City totals are also included in county totals												
EDGECOMBE		11	474	2.3	1	24	500	4.8	ALBEMARLE	1	27	176	1	2	64	1.9					
FORSYTH	5	68	2738	2.5	4	72	1144	6.2	ASHEVILLE	1	27	752	1	8	227	2.7					
FRANKLIN		4	186	2.1	13	238	1000	13.8	BURLINGTON	1	13	538	1	7	110	2.7					
GASTON	2	72	2472	2.9	5	22	475	4.6	CHAPEL HILL	2	7	312	5	60	60	1.9					
GATES		3	98	3.0		7	95	7.4	CHAPLOTTE	10	71	1146	4	72	1835	20.0					
GRAHAM		3	97	3.1		12	1000	1.2	CONCORD	1	8	218	2	7	104	2.7					
GRANVILLE	8	216	1000	21.6	3	27	347	7.8	DURHAM	1	19	964	6	33	764	3.7					
GREENE	2	91	1000	9.1	8	136	1000	13.6	EDEN	7	249	1000	5	74	74	1.9					
GUILFORD	13	122	3741	3.3	7	90	1547	5.8	ELIZABETH CITY	5	172	1000	4	80	80	1.9					
HALIFAX	2	6	385	1.6	1	25	594	4.2	FAYETTEVILLE	2	19	1033	1	25	568	3.1					
HARNETT	2	24	582	4.1	14	329	1000	14.3	GASTONIA	1	26	799	2	9	294	3.7					
HAYWOOD	1	27	724	3.7	2	23	1000	2.3	GOLDSBORO	1	5	323	1	15	265	2.7					
HENDERSON	5	29	722	4.0	1	41	1000	4.1	GREENSBORO	6	48	1750	5	48	917	2.7					
HERTFORD		2	130	1.5	2	19	244	7.8	GREENVILLE	1	11	324	9	189	9	1.9					
Hoke	5	124	1000	12.4	10	224	1000	22.4	HENDERSON	6	134	1000	2	9	167	2.7					
HYDE			42	0.4		2	51	5.1	HICKORY	1	4	362	9	100	100	1.9					
IREDELL	3	31	944	3.3	3	25	313	7.9	HIGH POINT	6	28	800	27	423	2.7						
JACKSON	5	267	1000	26.7			46	4.6	JACKSONVILLE	1	13	430	1	3	66	1.9					
JOHNSTON	2	24	742	3.2	2	14	298	4.7	KINSTON	1	3	259	1	15	223	2.7					
JONES		1	67	1.5		3	74	4.1	LENOIR	5	203	1000	2	44	44	1.9					
LEE		7	397	3.9		8	153	5.2	LEXINGTON		6	287	2	7	77	1.9					
LENOIR	1	15	565	2.7	3	25	429	5.8	LUMBERTON	6	232	1000	1	12	178	2.7					
LINCOLN	22	510	1000	51.0	5	95	1000	9.5	MONROE	5	142	1000	2	81	81	1.9					
MCDOWELL	2	21	525	4.0		35	1000	3.5	NEW BERN	1	5	173	9	122	10.0						
MACON		6	202	3.0		8	1000	0.8	RALEIGH	4	43	1523	1	45	606	3.1					
MADISON	7	7	226	3.1	2	17	274	6.2	REDSVILLE	5	155	1000	1	4	98	1.9					
MARTIN	9	203	1000	20.3	4	82	2113	3.9	ROANOKE RAPIDS	1	5	190	11	140	40	1.9					
MECKLENBURG	19	107	4765	2.2					ROCKY MOUNT E			123	1	11	140	10.0					
MITCHELL		4	211	1.9		3	1000	0.3	ROCKY MOUNT N	1	2	214	1	10	94	10.0					
MONTGOMERY		3	249	1.2	2	4	117	3.4	SALISBURY	7	219	1000	2	7	125	2.7					
MOORE	2	19	515	3.7	3	10	232	4.3	SANFORD	1	5	170	2	2	65	1.9					
NASH	1	9	525	1.7	2	27	494	5.5	SHELBY	1	7	217	2	7	119	2.7					
NEW HANOVER	1	37	1093	3.4	2	14	405	3.4	STATESVILLE	1	10	251	1	10	144	2.7					
									THOMASVILLE	1	9	190	3	100	100	1.9					
NORTHAMPTON			96	0.9	2	20	272	7.3	WILMINGTON	20	570	22.7	2	12	341	2.7					
ONSLow	8	57	2106	2.7	1	18	420	4.3	WILSON	2	6	301	16	280	2.7						
ORANGE	3	24	864	2.8	1	11	232	4.7	WINSTON SALEM	2	27	1432	4	69	1079	2.7					
PAMLICO		1	81	1.2	1	3	60	5.0													
PASQUOTANK		6	292	2.1	11	166	1000	16.6													

¹Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

of the obstacles to the care of patients on the same level as that provided other persons in the community. This was essentially the approach taken in the January 25, 1969, regulations concerning "Reasonable Charges," in which "Customary charges which are reasonable" was established as the upper limit for payment for non-institutional services. We believe that the January 25th pronouncement more accurately comports with the Congressional intent expressed in Section 1903(a) (30) of the medicaid law, than does the new regulation. . . .

"In departing from this earlier standard, by establishing arbitrary limits on payments to individual practitioners, it should be recognized that the July 1 regulations may again raise a barrier to providing private care to the medically indigent.

* * *

President Nixon said the nation will be confronted with a "massive" crisis in health care unless government and the private sector cooperates to hold down costs and to improve the system of delivery of medical services.

He made the statement in commenting on Health, Education and Welfare Department's "Report on the Health of the Nation's Health Care System." It carried the names of both HEW Secretary Robert H. Finch and HEW Assistant Secretary for Health and Scientific Affairs Roger O. Egeberg, M.D.

The report said the medicaid program—"badly conceived and badly organized"—was a major factor in rapidly rising health care costs by attempting "to provide medical services for the poor by pushing them into the nation's already overburdened health care system without developing the capacity in the system to serve them and without building the capability in the states to manage the program."

The report also said overtaxed health resources are being used wastefully and not being expanded rapidly enough. And not enough attention is being given to preventive health care, the report said.

Two advisory groups were set up: a HEW Secretary's Task Force on Medicaid and Related Programs under co-chairmen HEW

Undersecretary John G. Veneman and Walter J. McNerney, president of Blue Cross, and a special industry group with David J. Mahoney, president of Norton Simon, Inc., as chairman.

Dwight L. Wilbur, M.D., then president of the American Medical Association, congratulated the Nixon Administration for taking "such a thoughtful look at the accumulated problem that has been built up in the past as a result of hurriedly enacted programs, the buildup of unattainable expectations and creation of unsound administrative operations."

Dr. Wilbur also welcomed a call by Finch and Dr. Egeberg for discipline through the profession itself of "the very few members of the medical profession who have reportedly abused the (medicare and medicaid) programs."

* * *

Recent testimony by AMA witnesses before Congressional committees included:

—Dr. O. L. Simenstad, member of the AMA Board of Trustees, before the Senate Monopoly (Nelson) Subcommittee:

"The advertising policies of the AMA have recognized consistently the uniqueness of drug advertising in that it should not be directed to the public, but to physicians, and because of the public interest involved, it should be responsibly presented. As the drug products in this country have become more sophisticated, the Association's advertising policies have undergone evolution. Initially, an 'ethical' manufacturer was required to disclose the formula of his advertised products. 'Secret nostrums' could not be advertised in responsible medical journals such as JAMA. Today, honest presentation of claims is the primary criterion. . . .

"The policy of the AMA has been to update the advertising standards as the drug field changes. Two of the basic tenets have remained unchanged, however. One is that 'the appearance of advertising in AMA publications is not an AMA guarantee or endorsement of the product or the claims made for the product by the manufacturer,' and the other is that advertising space will not be sold unless 'the inclusion of advertis-

ing material does not interfere with the purpose of the publication.' "

Dr. Frederick C. Swartz, chairman of the AMA Committee on Aging, before the Senate Subcommittee on Health of the Elderly:

"Age is no bar to good medical or surgical treatment including open heart surgery, so long as the patient presents himself as a reasonably physiologically functioning unit to the physician.

"The medical and paramedical services—the physician and the para-physician personnel—must begin to realize that something can be done for diseases found among the oldsters. The days of condescension medicine to 'grandpa' and 'grandma' is at an end."

Philip L. White, secretary of the AMA Council on Foods and Nutrition, before the Senate Committee on Nutrition and Human Needs:

"... the United States needs to develop a national nutrition policy. . . The development of goals in food production and distribution, the establishment of adequate levels of nutrient intake for individuals and groups of people, plans for the nourishment of our future expanded populations are but a few of the issues which require national attention."

Dr. Henry Brill, chairman of the AMA Committee on Alcoholism and Drug Dependence, before the House Education Subcommittee:

"In the course of the AMA's work in this field, we have been profoundly impressed by the fundamental importance of public education about narcotic, depressant, and

stimulant drugs. In the first instance, of course, public information has a decisive impact on public attitudes and opinions, and in the long run this determines public policy. If drug taking for pleasure should ever become socially acceptable in this country and accepted as a harmless pastime, one could confidently predict that control of drug dependence would become impossible."

Dr. Marvin A. Block, a member of the AMA Committee on Alcohol and Drug Dependence, before the Senate Subcommittee on Alcoholism and Narcotics:

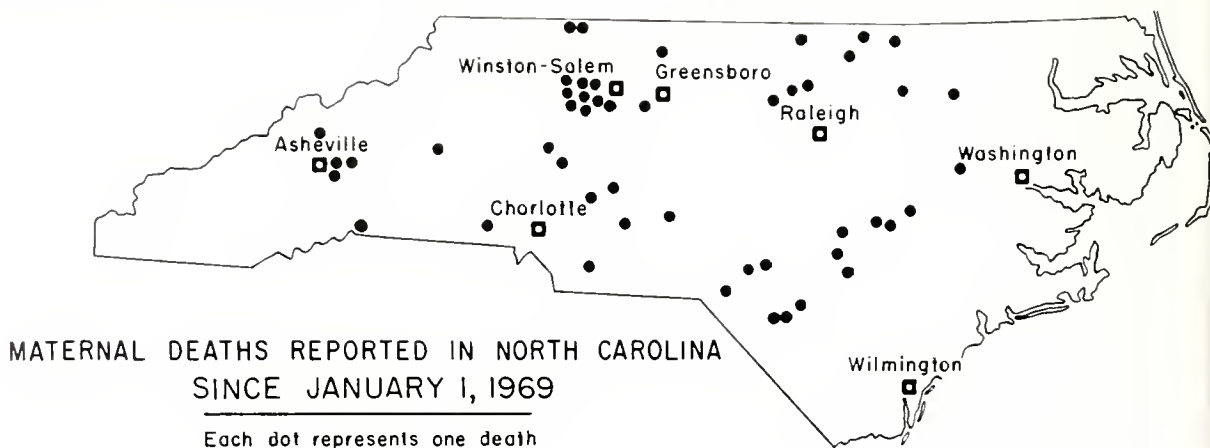
"... the crying need, aside from that of research and education, is for community facilities to treat and care for the alcoholic patient, who is entitled to the same rights and opportunities for treatment accorded other sick people."

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MEDICAL JOURNAL

PUBLISHED MONTHLY BY THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

IN THIS ISSUE:

Autogenous Vaccines in Chronic and Recurrent Infections

DAVID T. SMITH, M.D.

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Use of Autogenous Vaccines in Chronic and Recurrent Infections Resistant to Antibiotic Therapy

DAVID T. SMITH, M.D.

Chronic and recurring infections may result from a variety of mechanical, physiological, or immunological defects, and these possibilities should be considered when the patient fails to respond to antibiotic therapy.

I have had 46 years of experience in preparing, standardizing, and administering autogenous vaccines, and have concluded that at least 80 per cent of resistant patients are resistant because they have developed a hypersensitivity to bacteria, molds, or yeast which are growing in or on their tissues. It is my belief that 80 per cent of the recurring infections, which are caused by excessive allergy, can be controlled by the proper use of autogenous vaccines.

The Discovery of Autogenous Vaccines

Autogenous vaccines were first used by Sir Almroth Wright of London, between 1900 and 1904, for the treatment of recurrent boils and other skin infections caused by *Staphylococcus aureus*. Wright and Semple introduced the typhoid vaccine in 1897,¹ and Wright later tried to improve it.² He devised a method of measuring potential immunity by determining the progressive increase in the rate and amount of phagocytosis of the heat-killed typhoid bacilli. He concluded that the increased ability of the subject's white blood cells to phagocytize typhoid bacilli depended upon the appearance of a new substance in the serum which

he called "opsonins," and the total ability of the white cells to phagocytize was recorded as the "opsonic index." Later investigators showed that the increase in phagocytosis was the result of the cooperative effect of the normally occurring "complement" and the newly acquired specific "antibacterial antibody."

Wright was challenged by a series of patients who had recurrent boils or other skin infections for four to seven years, to try to vaccinate them against their boils. He began by isolating the patient's strain of *Staphylococcus* and preparing a heat-killed vaccine; hence the term "autogenous vaccine." On testing the ability of the patient's white blood cells to phagocytize his own strain of *Staphylococcus*, he found that their phagocytic index was less than that of normal individuals who had never had a boil.¹

The intracutaneous test for determining the degree of allergy was not discovered until 1908. In most of Wright's cases, therefore, his subcutaneous doses given for treatment were too large and produced both a local and a systemic reaction. But the patient's white blood cells began to phagocytize staphylococci, and simultaneously with the increase in phagocytosis, the patient made a rapid recovery from their boils.

Wright misinterpreted the mode of action of the autogenous vaccine. He assumed that he was stimulating antibody formation. Later investigators showed that this interpretation was incorrect. Patients with recurrent boils almost always have much more specific antibacterial antibodies in their serum than do other individuals.

James B. Duke Distinguished Professor of Microbiology, Emeritus, Duke University School of Medicine, Durham, N. C.

Request for reprints to Room 701, Statler-Hilton Inn, Durham, N. C. 27705.

The Mechanism of Action of Autogenous Vaccines

Although the mechanism of action of autogenous vaccines remained obscure, their use spread throughout the world and was extended to other bacterial infections as well as to infections with yeast and molds.³ Universal acceptance was not achieved, however, because of skepticism about the mode of action and because of the unpredictability of the results. There was no way to determine the proper dose of the vaccine for each patient, since the skin test method had not been introduced.

The suggestion that the immunological defect in these recurrent infections was an allergic reaction to the organism was made by a succession of investigators⁴⁻⁹ from 1923-1947.

By 1920 Rackemann¹⁰ was making intracutaneous skin tests with heat-killed autogenous vaccines to determine the degree of allergy in each patient. Thomas, Fama-lener, and Tonart⁵ began to make skin tests with autogenous vaccines on asthmatic patients about 1921, although their first publication did not appear until 1924. Unfortunately, their method of calculating the doses for treatment from the size of the skin reaction was so complicated that it was not accepted by other allergists.

It should have been obvious from Wright's original study that the inability of the white blood cells to phagocytize and destroy the staphylococci was the key to the apparent lack of immunity in patients with recurrent infections. Smith and Poston⁸ showed, in 1936, in a single patient with a subacute case of brucellosis, that in the presence of allergy to brucellergin the white blood cells could not phagocytize living brucella even when the patient's serum contained agglutinins in a 1:2560 dilution.

The experiment of Johanovsky,¹¹ reported in 1958, demonstrated conclusively that alterations in the white blood cells of rabbits could account for the increased susceptibility of the animals to staphylococcal infections. He found that rabbits sensitized by repeated injections of staphylococci were more susceptible to septicemia and death from these

organizations than normal unimmunized rabbits. Furthermore, this increased susceptibility could be passively transferred to normal rabbits with white blood cells from previously actively sensitized animals.

There seems to be a specific clone of lymphocytes which determine each different type of delayed hypersensitivity. One clone is specific for tuberculin allergy, another for histoplasmin and still another for allergy to staphylococci.¹² Fortunately, the inhibiting effect of the hypersensitivity can be neutralized, at least temporarily, by an overdose of the specific antigen involved, without affecting other types of allergy or without inhibiting the specific clones of lymphocytes which make specific gamma globulin antibodies.¹³

Methods for Making, Testing, and Administering Autogenous Vaccines

To obtain the best result with autogenous vaccines it is necessary to: (1) isolate each type of organism present in the lesion, or in the secretions, before new antibiotics are administered; (2) make a heat-killed vaccine from each type of organism isolated; (3) give intracutaneous skin tests with each vaccine and read after 30 minutes and again after 24 hours; (4) discard all vaccines which do not produce a skin reaction the size of a 10 cent piece (17 mm); (5) mix and dilute vaccines producing reactions measuring more than 17 mm, calculating the dilution according to the size of the strongest reactor. A table showing the amount of dilution needed can be found in the new 14th edition of *Zinsser's Microbiology*.¹⁴

The initial dose of the calculated dilution should be 0.1 ml, injected subcutaneously and followed by a second dose of 0.2 ml after 48 hours, if there is no local or systemic reaction to the initial dose. If there is a reaction to the initial dose, the vaccine should be diluted 10 times with sterile physiological saline and 0.1 ml of the diluted mixture given subcutaneously.

Sundays complicate the 48-hour schedule, and in the office or in the clinic the doses are usually administered on Monday, Wed-

nesday, and Friday or Tuesday, Thursday, and Saturday.

After a 1 ml dose of the weakest solution has been given, the next strongest solution is given, beginning again with 0.1 ml.

As the doses increase, it is the rule rather than exception that eventually a dose will be given which will produce a local area of induration. When such a reaction occurs, the dose should be reduced by 0.5 ml and continued as before. For example, if a reaction occurs with 0.8 ml of the strongest dilution, the dose is reduced to 0.3 ml. If the reaction occurs with 0.3 ml of a stronger dilution, the dose is reduced to 0.8 ml of a weaker dilution and continued on from this amount.

Summary

In the presence of the tuberculin-type hypersensitivity to bacteria, yeast, or molds, the patient's white blood cells have great difficulty in phagocytizing and destroying microorganisms. In such a patient, the presence of specific antibacterial antibodies do not promote phagocytosis.

The excessive hypersensitivity to a particular organism can be demonstrated by performing intracutaneous skin tests with autogenous vaccines.

The excessive hypersensitivity can be reduced or abolished, at least temporarily, by the proper dose of autogenous vaccine. Vaccines used in this manner not only neutralize

the inhibiting effect of the excess allergy, but can stimulate the production of specific antibacterial antibodies.

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The leprosy, which was so common in this country long ago, seems to have been near a-kin to the scurvy. Perhaps its appearing so seldom now, may be owing to the inhabitants of Britain eating more vegetable food than formerly, living more upon tea, and other diluting diet, using less salted meat, being more cleanly, better lodged and clothed, etc. For the cure of this disease, we recommend the same course of diet and medicine as in the scurvy.—William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines*, etc., Philadelphia, Richard Folwell, 1799, p. 281.

Hospital Visiting — Help or Hindrance?

JOHN MCCAIN, M.D., JOHN K. LOCKHART, GEORGE P. HARRIS,
AND H. C. CRANFORD

The North Carolina Committee on Patient Care, after completing a study and pilot project on the problem of uncontrolled hospital visitation, made recommendations to the Medical Society of the State of North Carolina, the North Carolina Hospital Association, and the North Carolina Nurses Association. The recommendations were adopted by the three state organizations in 1968.

Joint Recommendations

1. That a statewide program be recommended to improve visitation practices in all North Carolina hospitals. The methods used in the test counties may well be used as guidelines for a statewide program implemented by the North Carolina Patient Care Committee.
2. That such a program include a coordinated statewide educational effort aimed at familiarizing the general public with the desirability of improved hospital visitation practices and the benefits accruing to improved patient care.
3. That because the real value of a statewide program would be contingent upon uniformity, hospitals should be encouraged to adopt similar visiting regulations and control methods (insofar as possible).
4. That the organization of local hospital visitation committees composed of representatives of the medical, nursing, and administration departments and the general public be encouraged to accomplish these goals in each hospital.

General dissatisfaction with visiting practices in North Carolina hospitals was

high-lighted in 1964 by a statement by the Medical Society of the State of North Carolina, the North Carolina Nurses Association, and the North Carolina Hospital Association which indicated that improper visitation is a significant health problem worthy of further evaluation.

In response to this mandate for improvement of hospital visitation practices, hospitals in North Carolina were surveyed by the Department of Hospital Administration of the University of North Carolina, using multiple methods of data collection.¹ It was found that more than 50% of the hospitals studied expressed discontent with their present systems of hospital visiting. The study recommended that the North Carolina Committee on Patient Care develop a program designed to improve visitation which could be adapted to any hospital.

Pilot Study

In response to this recommendation, the North Carolina Patient Care Committee undertook a program to improve hospital visiting practices by conducting demonstration projects in two counties in North Carolina. Beaufort County was selected as a rural, agricultural county with a population of 36,000 and one principal hospital. Forsyth County was chosen as a large metropolitan area with 220,000 population and three large hospitals. Since it was reasoned that the solution to the visitation problems in these two counties required the same approach as to other health problems—*i.e.*, a coordinated, unified approach involving both providers and consumers—"community visitation committees" consisting of interested lay and professional people were appointed in both these communities. The purposes of these local committees were:

1. To study and identify the problems created by hospital visiting.
2. To determine and implement programs to solve the problems of visitation.

¹Submitted by the North Carolina Committee on Patient Care, a committee of physicians, nurses, hospital administrators, and lay persons concerned with better patient care in North Carolina.

From Wilson Clinic, Wilson, North Carolina (Dr. McCain); Northern Hospital of Surry County (Mr. Lockhart); Duke Endowment, Hospital and Child Care Sections (Mr. Harris); and North Carolina Blue Cross and Blue Shield (Mr. Cranford).

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3. To measure the effectiveness of the measures taken by subjectively evaluating the changes in visiting patterns one year after the inauguration of the programs.

On both these committees were representative physicians, nurses, hospital administrators, trustees, clergy, and members of influential civic organizations. Both undertook surveys of existing visiting practices, including a head count of visitors in the hospitals on representative days and interviews with randomly selected groups of patients, nurses, physicians, and ancillary health personnel. (The services of volunteers were utilized in conducting the surveys at the hospitals). Programs of control and education specifically designed to improve visiting practices were put into effect in all hospitals involved in the project.

After these programs had been in operation one full year, both committees repeated the initial surveys, excluding as many variables as possible. For purposes of comparison, the same day of the week and month and the same areas of the hospital, as far as possible, were utilized in the end-of-the-year measurement. Other characteristics of the survey (weather, outstanding local social events being conducted at the time, *etc.*) were evaluated but not held to be significant.

Visitation Committee Approach

In both counties, existing visitation practices were first considered in detail and recommendations to improve visitation were made. Acting on these recommendations, some of the hospitals further limited the hours available for hospital visitation. "Leaks" in the existing visitation policies in the participating hospitals were also identified and eliminated as far as possible. Both committees undertook programs to enlighten the general public on proper visitation practices. These educational programs involved the use of news releases to all communications media, speaker bureaus to give programs at civic, religious and professional organizations, news spots on TV and radio, *etc.* An important aspect of the programs was in-service training of all hospital health

personnel involved in the visitation programs.

After the initial evaluation, two hospitals in the urban county elected to withdraw from the program. One of these hospitals serves largely as a teaching facility with a high percentage of patients coming from areas outside the county which were not included in the educational program. The second hospital was a smaller community hospital which had recently up-dated its visitation program.

In Beaufort County the visiting hours were announced and a visitation desk with the visitor card system was set up. Visiting was limited to two visitors at a time, 15 minutes for patients in private and semi-private rooms and one visitor, 15 minutes, for each ward patient.

Each visitor was given a card when he came into the hospital or if the cards of the patient he came to see were in use, he had to wait in the lobby until one became available.

In Forsyth Memorial Hospital, visiting hours were determined and posted. The information desk was chosen as the control unit to distribute special passes to family members and others approved for "off hours visitation." Security guards were told to make rounds of the hospital during and at the end of visiting hours to encourage cooperation with the program. Two hostesses were named to work at the information desk and to assist in implementing the program, and the doors of the main entrance to the hospital were locked at 8:30 P.M.

Results

The results of the year-end survey showed substantial changes from the initial survey. It was found that visiting traffic had been reduced by nearly 50% in the rural county hospital and more than 30% in the participating urban hospital. The average length of stay in the rural hospital was reduced from 75 minutes to 41 minutes. The number of visitors was reduced from 5.9 to 2.9 per patient per day. In the urban hospital the average length of visit was reduced from

54 to 48 minutes. The number of visitors per patient per day was reduced from 5.4 to 3.8. Interviews with patients, visitors, and health professionals revealed, in general, a favorable response to the new visitation program.

Conclusions

"Quality" in visiting is much more important than "quantity." Patients prefer brief visits to long visits.

Visiting practices can be considerably improved if hospitals adopt proper visiting regulations, coupled with an educational program for staff and public.

Visitors are more receptive to regulations if they are aware of the reasons why visitor control is a necessity. Controlled visitation is effective only if proper and concentrated educational tools are used to inform the visitor of his responsibilities and the needs of the patient. A good internal and external public relations and educational approach is better than police regulations.

Co-operation from the entire hospital staff and special orientation of reception personnel are necessary for effective control of visitors.

The visitor likes to feel that he is a member of the patient care team, that he is needed by the patient and by the hospital, and that

he provides a real service to the patient. Visiting regulations can succeed only if the visitor is aware of the patient's needs and is genuinely interested in the patient's health. Education proved invaluable in stressing these points to visitors in both test counties.

There are several types of visitors, ranging from immediate family to "social visitors." An effective visitation program must foster an understanding by those not intimate with the patient that their visits can sometimes be less than beneficial, and that notes and cards often prove more effective than visits.

Acknowledgements

This study was supported by a grant from the United Medical Research Foundation of North Carolina, Inc. Dr. Charles W. Hooker and T. S. Meyer of that Foundation were helpful in the overall planning of the project.

Mrs. Mary Lee Steele (Beaufort County) and Charles Green (Forsyth County) served as chairmen of the two hospital visitation committees.

Communications Associates, Wilson, North Carolina, a public relations firm, assisted in conducting the project and accumulating data in the two demonstration counties, under the supervision of the North Carolina Patient Care Committee.

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The vulgar are remarkably credulous with regard to the cure of the scrophula; many of them believing in the virtue of the royal touch, that of the seventh son, etc. We know but little of the nature or cure of this disease, and where reason or medicines fail, superstition always comes in their place. Hence, in diseases which are the most difficult to understand, we generally hear the greatest number of miraculous cures being performed. Here, however, the deception is easily accounted for. The scrophula, at a certain period of life, often cures of itself; and, if the patient happens to be touched about this time, the cure is imputed to the touch, and not to Nature.—William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Philadelphia, Richard Folwell, 1799, p. 282.

The Carcinoid Tumor, Syndrome, and Spectrum

A REVIEW OF THE LITERATURE

ALAN JAY SIMPSON, M.D.

Following the description and recognition of the carcinoid syndrome during 1952-1954,¹⁻⁴ many additional reports soon appeared in the world medical literature. In the earlier articles, special emphasis was placed upon the clinical features, the pathophysiology of the unusual signs and symptoms, the laboratory diagnostic tests, and finally a consideration of proper surgical and medical therapy. With expanding interest in the carcinoid syndrome, the properties of the carcinoid tumor itself were re-examined. This renewed attention to carcinoid disease was further heightened by recent studies of the pharmacological and physiological properties of serotonin. In his 1958 review, Thorson⁵ summarized the existing body of information which had rapidly developed concerning carcinoid disease.

During the past decade interest in carcinoid disease has largely centered on the recognition of the variants of the carcinoid syndrome, with the realization that serotonin is not the sole mediator of all the associated clinical features. It has become apparent that the "classic carcinoid syndrome" is but a part of a "carcinoid spectrum."⁶

This review is an attempt to organize a considerable body of information which has appeared, especially since Thorson's review a decade ago, on the features of the carcinoid tumor, syndrome, and spectrum. Each of these aspects will be discussed with respect to historical background, pathology, clinical features, pathophysiology, diagnosis, and treatment. Current concepts of serotonin physiology, pharmacology, and metabolism will be reviewed as they relate to specific clinical signs and symptoms. Other biologically active compounds which have been implicated in carcinoid disease will also be discussed.

Historical Review

Although there were earlier histological

descriptions of carcinoid tumors, Lubarsch⁷ is usually credited with the first description of the lesion (1888), and its distinction from adenocarcinoma of the ileum. In 1907 Oberndorfer⁸ coined the term *karkinoid* to differentiate this tumor of the small intestine and emphasize its malignant appearance despite a seemingly less aggressive clinical course. Oberndorfer believed the tumors to be benign and of limited clinical significance. They were thought to arise from the chromaffin cells of the intestine, previously described by Kultschitzky.⁹ Gosset and Masson¹⁰ pointed out the similarity of the lesions to the chromaffin tissue of paraganglia, and regarded the former to be of endocrine origin. In 1914 Masson demonstrated that the tumor cells reduced silver salts. In 1928, using his silver impregnation technique, Masson¹¹ demonstrated cytoplasmic granules in the Kultschitzky cells in the crypts of Lieberkuhn, thus establishing the argentaffin cell origin of the tumor and its name (argentaffinoma). The carcinoid, argentaffin, or Kultschitzky-cell tumor was thus established as a clinical characteristic histochemical property. Early interest was therefore directed primarily to the morphology of the tumor rather than to the clinical aspects of the disease.

For many years there appeared sporadic case reports¹²⁻¹⁵ of peculiar cutaneous vasomotor phenomena associated with valvular and other endocardial lesions of the right side of the heart, recurrent attacks of watery diarrhea, and dyspnea in patients with metastatic abdominal tumors. Such patients were thought to have unrelated intestinal, dermatological, and cardiac disease. In 1952 Biorck, Axen, and Thorson¹ reported a case of jejunal carcinoid tumor associated with unusual cyanosis, hepatomegaly from tumor metastasis, cardiac valvular disease, and dermatological manifestations. They suggested a causal relationship between the carcinoid tumor and the

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clinical findings. In 1953 Isler and Heding¹ in Germany, and Rosenbaum and others² in the United States, independently reported 5 new cases with features similar to those described by Biorck and colleagues the year before. They suggested that these findings constituted a new clinical syndrome.

In 1954 Thorson and others³ further suggested that the clinical and pathological phenomena might be the result of a hormonal secretion by the tumor—possibly serotonin. This concept was supported by the work of Lembeck,¹⁶ who had previously extracted serotonin from a carcinoid tumor, and by that of Erspamer and Asaro,¹⁷ who demonstrated serotonin production by the chromaffin cells of the intestinal tract. Fuller descriptions of the carcinoid syndrome eventually disproved the benign nature of the carcinoid tumor as proposed by Oberndorfer.¹⁸

With the establishment of the malignant carcinoid syndrome as an entity, reports of new cases appeared throughout the world. Many contributions were made to the biochemistry and clinical description of the disease. As additional patients were studied, it was necessary to revise and extend earlier concepts. A variety of cases were reported in which the primary tumor originated in the lung, ovary, pancreas, stomach, bile ducts, or Meckel's diverticulum, rather than in the small intestine. "Variant" syndromes were described in which large amounts of histamine or the serotonin precursor, 5-hydroxytryptophan, or both were secreted. Although serotonin was long considered to be the key substance in the pathogenesis of the syndrome, it failed to explain the clinical features of a few cases in which increased amounts of serotonin metabolite were not found in the urine. Furthermore, there appeared to be a lack of correlation between serotonin blood levels and clinical symptomatology. Lastly, serotonin did not appear to be the sole mediator of the many signs and symptoms, particularly the flush. Thus, in 1964, Melmon and Sjoerdsma⁶ properly suggested the concept of a "carcinoid spectrum" to replace that of a specific carcinoid syndrome.

The preceding historical sketch of the development of knowledge of the carcinoid tumor, syndrome, and spectrum provides the foundation for the remainder of this review. These separate yet overlapping clinical conditions will be examined individually after a brief review of current concepts of serotonin physiology, pharmacology, and metabolism.

Serotonin: Physiology, Pharmacology, and Metabolism

Historically, serotonin has been the subject of great interest to investigators. Initial interest was directed toward its possible role as the vasoconstrictor substance of blood platelets. In 1912 O'Connor¹⁹ proposed that a vasoconstrictor, released from platelets during coagulation, participated in hemostasis by constricting the vascular smooth muscle surrounding the clot. In 1947 this vasoconstrictor was isolated from beef serum and identified by Rapport, Green, and Page.²⁰ In 1949 Rapport²¹ proposed its chemical structure as 5-hydroxytryptamine, and named it serotonin. The structure of serotonin (5-HT) was confirmed by synthesis in 1951.^{22,23}

Earlier, during the mid-1930s and 1940s, Erspamer²⁴ conducted investigations which led to the characterization of enteramine. This substance imparted peculiar histochemical properties to the enterochromaffin cells of the gastrointestinal mucosa and stimulated contraction of intestinal and uterine muscle. In 1950 Erspamer and Broretti²⁵ isolated enteramine, which was soon identified as 5-hydroxytryptamine.¹⁷ Thus, in 1952, a naturally occurring substance which had the dual effect of constricting blood vessels and stimulating intestinal motility was identified as 5-hydroxytryptamine.

Subsequent research on serotonin has been extensive.^{26,27} However, there has often been a tendency to attribute direct clinical significance to many of the experimental results obtained from animals and in biological *in vitro* systems. This has led to confusion about the role of serotonin in various clinical disorders. This summary will try to place in proper perspective the physiological and

pharmacological effects of serotonin in man and show how the latter relates to carcinoid disease.

The metabolism of serotonin is now clearly understood and is summarized in Figure 1. Tryptophan, an essential amino acid, is the dietary precursor of serotonin. In normal individuals less than 1% of ingested tryptophan is directed toward the production of serotonin.²⁸ The remainder is utilized principally in protein and niacin synthesis. In the liver tryptophan is hydroxylated to form

Oxidative deamination to 5-hydroxyindolacetaldehyde by monamine oxidase (MAO) provides the principal metabolic pathway for serotonin degradation; 5-hydroxyindolacetaldehyde is then converted to 5-hydroxyindolacetic acid (5-HIAA) by 5-hydroxyindolacetaldehyde dehydrogenase. Monamine oxidase is found in especially high concentration in the liver, lung, and all portions of the brain. Both the aldehyde and the acid are physiologically inert. Since the conversion of the aldehyde to the acid is not rate

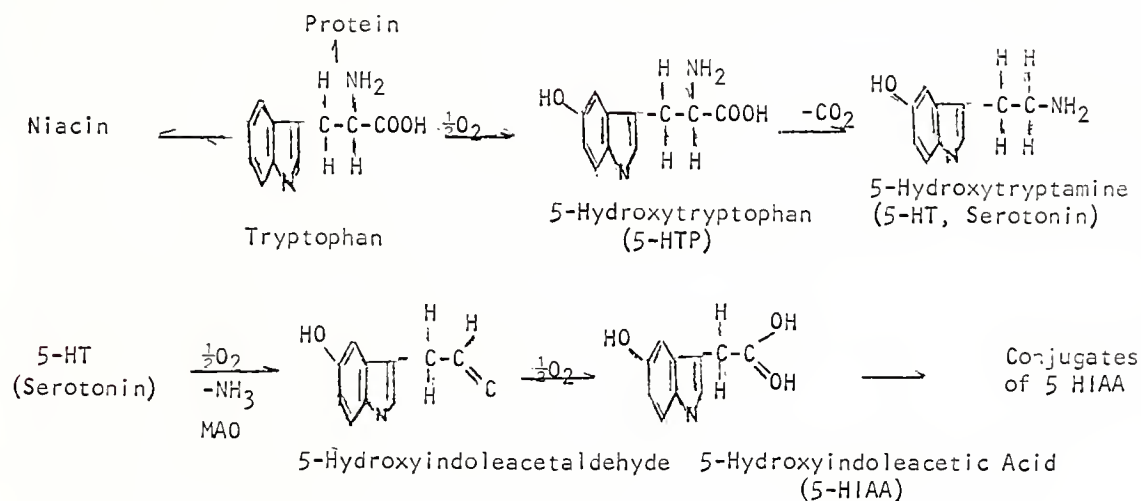


Figure 1

5-hydroxytryptophan (5-HTP), this being the rate-limiting step for serotonin metabolism. 5-HTP is then decarboxylated to form 5-hydroxytryptamine, or serotonin, (5-HT) by a specific enzyme, 5-hydroxytryptophan decarboxylase, which is found in all tissues containing serotonin except blood. Within the central nervous system the distribution of 5-HTP decarboxylase closely parallels that of serotonin. The greatest concentrations are present in the hypothalamus and other primitive portions.²⁹ While available studies²⁷ indicate that serotonin synthesis occurs principally in the enterochromaffin cells of the intestine, the wide distribution of the decarboxylase enzyme suggests other sites as well. There is evidence that serotonin can be synthesized in brain tissue. For instance, serotonin cannot penetrate the blood-brain barrier; nevertheless, the concentration of serotonin in the brain increases following infusion of its precursor 5-HTP.

limiting, the action of MAO in serotonin metabolism may be considered synonymous with the conversion of 5-HT to 5-HIAA. 5-HIAA is excreted in the urine, and its determination has become the principle diagnostic tool for the carcinoid syndrome.

Less important pathways for serotonin degradation include (1) oxidation by the cytochrome C enzyme system; (2) acetylation by acetyl coenzyme A to form N-acetylserotonin, which is conjugated with glucuronic acid; and (3) degradation by ceruloplasmin. These secondary metabolic routes assume increased importance when the main pathway is blocked, as for example, by MAO inhibitors.³⁰

It should be mentioned that 5-HTP can be directly converted to 5-HIAA without previous decarboxylation, and this metabolic route may assume significance in certain gastric carcinoids.³⁰

In the text which follows, 5-hydroxytrypt-

tamine will be designated as 5-HT or serotonin, 5-hydroxytryptophan as 5-HTP, and 5-hydroxyindolacetic acid as 5-HIAA.

Reserpine release studies indicate that 5-HT is stored in three principal sites—namely, the blood platelets, the brain, and the intestine,³¹ whereas the bulk (90%-95%) of precursor 5-HT is localized in the enterochromaffin cells of the gastrointestinal mucosa from the stomach to the colon.

The human intestine is quite responsive to 5-HT or its precursor 5-HTP. Although studies on the effects of serotonin administered intravenously on the gastrointestinal tract in humans have been limited by the cardiovascular and pulmonary responses to the amine, Haverback and Davidson³² have shown that a marked increase in intestinal tone and motility follows administration of 5-HT. While 5-HTP administration has no effect on pulse, blood pressure, respiration, or mental status, nevertheless intestinal motility is increased. Sometimes the increased intraluminal pressure results in cramps, nausea, and vomiting.³³ Intraluminally administered 5-HT or 5-HTP has no effect upon motility.^{30,31} It is currently believed that 5-HT plays a neurohumoral role in gastrointestinal muscular activity, perhaps by stimulating cholinergic nerves distal to the submucosal ganglia, or by vascular control of the gastrointestinal tract, or both.

Lysergic acid diethylamide (LSD) potentiates intestinal motility initiated by 5-HT despite the usual inhibitory properties of LSD on other activities of 5-HT.³⁰ Brom-LSD, an analogue of LSD without hallucinogenic properties, inhibits intestinal motility stimulated by 5-HT or 5-HTP. Whereas reserpine, chlorpromazine, diphenhydramine, and tripelannamine have been used therapeutically, they do not significantly reduce the motility stimulated by 5-HT in man.³⁰ Finally, the effect of 5-HT upon gastric secretion remains unclear.²⁰

Serotonin also affects the bronchial tree probably by constrictor activity on smooth muscle. Aerosolized serotonin has induced bronchoconstriction in asthmatics, and intravenously administered 5-HT induces hypernea.²⁹ This bronchoconstrictor effect is

frequently observed in patients with functioning carcinoid tumors who exhibit wheezing, respiratory stridor, and rhonchi.^{27,29}

Vasoconstriction was the first physiological effect attributed to 5-HT; however, the vascular response to 5-HT depends to a great degree upon the pre-existing tone of the blood vessels.²⁷ In the presence of increased vascular tone, 5-HT may produce dilation and hypotension, and if the initial tone is decreased, it may cause vascular constriction and hypertension. Occasionally no effects on blood pressure are noted. Because of this dual vascular response, Page³⁴ has called the action of 5-HT on arterial pressure amphibaric.

Serotonin seems to have varying effects on specific vascular beds. In the pulmonary vascular bed it is a powerful constrictor.³⁵ Doses of 5-HT insufficient to cause systemic circulatory effects are capable of producing pulmonary vascular constriction.²⁷ This pulmonary pressor effect cannot, however, be consistently demonstrated in man.²⁹ In the kidney, 5-HT seems to decrease renal blood flow and the glomerular filtration rate through vasoconstriction in the afferent glomerular vessels.³⁶ In the skin 5-HT constricts arteries and veins, yet dilates capillaries, resulting in decreased blood flow and increased vascular volume.²⁹ It is apparent, therefore, that the cardiovascular effects of 5-HT in man are complex and often difficult to interpret.

Recent observations tend to discount the role of 5-HT in the characteristic flush of the carcinoid syndrome. Furthermore, it is possible that many or all of the cardiovascular actions ascribed to 5-HT may be mediated by other substances such as kinins or histamine.⁶

Other effects of 5-HT such as its function in cerebral pharmacodynamics, anaphylaxis, and other allergic manifestations, in platelet physiology, and in hemostasis remain for the most part speculative, and such discussion is beyond the context of this review.

The Carcinoid Tumor

Carcinoid tumors originate from the chromaffin cells of the intestine and lung. They

may be found anywhere along the intestinal tract from the cardia of the stomach to the anorectal junction. They occur most often in the areas derived from the embryologic midgut³⁷ (mid-duodenum to mid-transverse colon); especially the appendix and terminal ileum. The tumor comprises 0.05% to 0.20% of all neoplasms³⁸ and 0.4%³⁹ to 1.0%⁴⁰ of all gastrointestinal tumors. Carcinoid tumors have been reported in all age groups from ten days to 89 years.⁴¹ Both sexes are affected equally. To date, approximately 2,500 cases have been collected from the literature by Sanders and Axtell.⁴²

Carcinoid tumors grossly⁵ appear small, firm, and yellow. They are usually well circumscribed, but nonencapsulated. The tumor is characteristically situated within the submucosa of the intestine, but often invades the muscularis layer and less often the mucosa.

Microscopically,^{5,43,44} the typical tumor consists of round or polygonal cells in compact nests, strands, or cords separated by a framework of delicate connective tissue. The cells often show radial palisading at the periphery of the clusters. There is a tendency for some cells to differentiate toward cylindrical forms and to organize into rosettes or pseudoglands. The center of the rosette is frequently filled with a homogenous eosinophilic material. The cell nuclei are usually spherical and are centrally located except with rosette formation, where the nuclei and cytoplasmic granules are located more basally. Mitotic figures are scarce. The cytoplasm is moderate in amount, and on fixation with formaldehyde its granules may reduce certain silver or chromic salts, producing the characteristic staining properties of carcinoid tumors — argentaffinity or chromaffinity.

These two histochemical properties cannot be demonstrated in all carcinoid tumors and do not always occur together. Of the two, argentaffinity is perhaps more specific. Most carcinoids, especially of midgut origin, are said to be argentaffin-positive. One portion of the tumor may be strongly positive while other sections of the same tumor may be negative, and metastatic lesions from pri-

mary argentaffin tumors sometimes are non-argentaffin. The variability in argentaffinity may be due to differences in the secretory phases of the cells. The chromaffin reaction, on the other hand, is not specific for the Kultschitzky cell or carcinoid tumor cells and is probably more characteristic of the pheochromocytoma.

Other histochemical reactions employed for the demonstration of carcinoid tumors include the argyrophilic reaction, the reduction of ferric ferricyanide and the azo-coupling reaction. Argyrophilic tumors reduce silver salts only in the presence of added reducing agents and are often of foregut origin—for example, bronchus, stomach, or pancreas. The reduction of ferric ferricyanide, although not as specific, is about as sensitive as the argentaffin reaction; it is easier to perform, and appears more reliable. The azo-coupling reaction is the most specific of the identification reactions especially when stabilized diazonium salts are employed. Lillie and Glenner⁴⁵ recommend routine application of the latter two reactions to all carcinoid tumors, especially gastric and rectal carcinoids since they are usually argentaffin-negative.

The biological activity of carcinoid tumors with respect to malignant potential varies according to location. Metastasis most likely originates in primary tumors of the small intestine, cecum, and colon. Common sites of spread include the regional lymph nodes and liver. Of 149 extra-appendiceal carcinoids studied by MacDonald,⁴⁶ 67% showed metastasis, 39% spreading to the regional lymph nodes and beyond, and 16.0% producing metastasis in the liver or lungs. Sixteen⁴⁶ to 29.0 per cent⁴⁷ of extra-appendiceal carcinoids are of multicentric origin.

Since carcinoid tumors of the gastrointestinal tract are usually located in the submucosa, they spread centrifugally, invading the muscularis and mucosa, and ultimately the serosa. Further spread occurs via the lymphatics and perineural spaces into the regional lymph nodes. The tumor may occasionally ulcerate and encroach on the bowel lumen. However, hemorrhage and obstruction are infrequent.⁴⁸ If the primary carci-

noid erodes the serosa into the peritoneum and mesentery, the tumor seems to stimulate a marked fibroblastic reaction. The resulting fibrosis and scarring create adhesions between several loops of bowel, causing an acute angulation of the bowel and obstruction of the lumen.⁴⁷ This distortion of the bowel may result in a roentgen sign of carcinoid growth.⁴⁹ Although the metastatic process is slow, the size of the secondary tumor is usually much larger than the primary.⁵⁰ Sometimes the sheer mass of mesenteric nodes predisposes to volvulus formation or compromises the mesenteric circulation, with resulting bowel infarction.⁴⁷

Some authors^{18,48} have reported carcinoid tumors in association with other malignant growths. Finally, there seems to be an unduly high incidence of associated gastric and duodenal ulcers.⁴⁶

Stomach

Eighty-six cases of gastric carcinoid have been reported since 1923, with only five patients manifesting the carcinoid syndrome.⁴² In 16% of the 86 patients the tumor had metastasized. Although the tumor has no characteristic location within the stomach, the proximal portion is less often involved.⁵¹ Gastric carcinoids are frequently more aggressive than other "intermediate tumors" of the stomach,⁴⁴ yet the prognosis is fairly good. Christoduolopoulous and Klotz⁵² reported a surgical series of 26 patients of whom 11 were living and well 8 to 18 years following resection. As of 1959, only three deaths directly due to gastric carcinoid had been reported.

Duodenum

In 1964 Sanders and Axtell⁴² tabulated 64 cases of primary duodenal carcinoid. Although the Kultschitzky or argentaffin cells are normally most numerous in the duodenum and appendix, the ratio of duodenal carcinoids to appendiceal tumors is exceedingly small. Duodenal carcinoids occur most often in the first portion, less frequently arise from the region of the ampulla of Vater, and only rarely from the third part.⁵³ Many duodenal carcinoids are silent, but those that are symptomatic generally pro-

duce obstruction, ulceration, or obstruction of the common bile duct. Carcinoids in the second part of the duodenum are most difficult to treat because of bile and pancreatic duct involvement. Although it is believed that carcinoids produce obstruction by serosal infiltration with secondary kinking of the bowel loops rather than luminal obstruction, a 1-3 cm carcinoid located just distal to the pylorus has produced obstruction in this especially narrow portion of the gastrointestinal tract.⁵⁴ Twenty-three per cent of reported duodenal carcinoids demonstrated metastasis,⁴² but the overall prognosis is said to be good.

Jejunum and ileum

Carcinoid tumors comprise approximately 8.3% of neoplasms of the small bowel.⁴⁰ Approximately one-third of Sander's and Axtell's 2,500 cases were found in the small bowel, with the ileum as the primary site eight times more frequently than the jejunum. The region of the ileocecal valve was an especially common site. Thirty-three per cent of the 841 intestinal carcinoids demonstrated invasion of the intestinal wall and occasional distant metastasis. The size of the primary lesion correlates well with the incidence of metastasis. In Moertel's series of 209 cases from the Mayo Clinic,⁴⁷ 2% of lesions measuring less than 1 cm metastasized, whereas 50% of lesions greater than 1 cm and 80% of those greater than 2 cm metastasized.

In most patients with the carcinoid syndrome, the primary tumor arises in the ileum, but the majority of small bowel carcinoids are asymptomatic, and are usually discovered at autopsy or during surgery as incidental findings. When symptoms are present, metastasis has usually occurred.

The unusually long natural history of the disease is one of the unique features of carcinoid tumors of the small bowel which distinguishes it from other malignant lesions. Of 28 cases followed by Moertel and others⁴⁷ from the onset of symptoms until the time of death, the average duration of the disease was 8.1 years with a maximum range up to 23 years. Gonzales

and others,⁵⁵ in a review of 34 cases, found the average survival time from onset of symptoms to be 8.2 years, and from the time of diagnosis to be 3.5 years.

Prognosis varies with the extent of metastasis. Moertel and colleagues,⁴⁷ in a series of 50 cases, found that of the 28 patients treated surgically, 68% survived five years despite the presence of nodal or peritoneal metastasis in 17 of these patients. The five-year survival for the 22 inoperable patients was 38% for those with nodal or peritoneal involvement, and 21% for those with liver metastasis.

Appendix

The appendix is by far the most common site of carcinoid tumors. Morehead⁴⁴ reports that approximately 0.3% of all appendices contain carcinoids; moreover these tumors comprise approximately 90% of all appendiceal neoplasms. Seventy-five per cent of the appendiceal carcinoids are found in the distal third of the organ, with less than 10% occurring at the base.⁵⁶ Tumors located in the distal third may demonstrate malignant changes. Their histologic structure is similar to the extra-appendiceal carcinoids, which are commonly thought to be more malignant. This benignity, however, is more apparent than real. Most carcinoids are discovered incidentally during appendectomy or other operations. The incidence of "symptomatic" appendiceal carcinoids is about 10%. Symptoms are believed to be due to fibrosis of the appendiceal lumen adjacent to the carcinoid rather than to carcinoid cell proliferation *per se*.⁴² Because of the small size of the appendiceal lumen, symptoms of obstruction can occur early, simulating appendicitis and resulting in earlier surgical removal of the carcinoid prior to metastasis. Thus carcinoids of the appendix were thought to be benign and to occur among the young, more of whom undergo appendectomy than do older people. MacDonald's criteria for establishing malignancy in appendiceal carcinoids are (1) microscopic demonstration of tumor invasion into the underlying muscle coats, lymphatics or blood vessels; and (2) exclusion of extra-appendiceal sites as the source of metastasis.

Sanders and Axtell⁴² found a 2.9% incidence of metastasis in 1,173 cases of appendiceal carcinoids. Latham and others,⁵⁶ in their review of approximately 1,000 cases, reported 30 cases of metastasis. In the few cases demonstrating metastasis, extension was usually via the regional lymph nodes.⁵⁷ However, involvement of the liver has been reported in two patients,^{58,59} one of whom exhibited the carcinoid syndrome.⁵⁹ Prognosis is excellent, with no reports of death directly due to carcinoid of the appendix.

Meckel's diverticulum

Thirty-three cases of carcinoid tumor arising in a Meckel's diverticulum have been reported.⁶⁰ Approximately 50% were symptomatic, and about one third were found at autopsy. Metastasis to the regional nodes, mesentery, and liver occurred in 21.8%. In general, carcinoids in this location behave more like intestinal than appendiceal tumors.⁴²

Cecum and colon

Thirty-nine cases of cecal and 26 cases of colonic carcinoids have been reported.⁴² Carcinoids in these locations have the highest incidence of metastasis of all carcinoids of the gastrointestinal tract: 71% for cecal and 52% for colonic carcinoids. Because of this aggressive behavior, a more radical approach to therapy is usually recommended.

Eight cases of carcinoid tumor of the gallbladder have been reported.⁶¹ Ages ranged from 56 to 71 years, with an average of 65 years. Gallbladder carcinoids are usually asymptomatic, and are not commonly associated with cholelithiasis or cholecystitis. In one case,⁴² however, local invasion was present. In no case has distant metastasis been reported.

Rectum

Three hundred and two cases of rectal carcinoid tumor have been compiled.⁴² Bates⁶² reported the lesion to occur predominantly in men during the sixth decade, while Miller⁶³ found an approximately equal sex distribution over a wide age range. The tumor begins as a submucosal nodule commonly located on the anterior wall of the middle

third of the rectum. The lesion gradually increases in size and may become annular-constricting, polypoid or ulcerating, and virtually indistinguishable from rectal carcinoma. The tumor has a rubbery texture and on being sectioned is a yellow-gray color. Most lesions are silent, but when symptoms occur they are related to mucosal ulceration. Metastasis usually occurs late; it was present in 28% of the reported cases.⁴² The incidence of metastasis again correlates well with size.⁴¹ Of lesions measuring less than 2 cm 7% had metastasized, while of the larger ones 90% had nodal and 60% distant involvement. Rectal carcinoids are non-argentaffin, and no case as yet has been associated with the carcinoid syndrome.^{62,63}

Pancreas

Primary carcinoid tumors of the pancreas are extremely rare; only three cases have been reported.⁶⁵⁻⁶⁷ One of these presented features of the carcinoid syndrome.⁶⁵ Since pancreatic carcinoids are of foregut origin they are argentaffin-negative, but argyrophilic-positive.⁶⁵ There have been reports of carcinoid syndrome associated with pancreatic tumors which do not fulfill the histological criteria for carcinoid tumors. In addition, these tumors secrete other hormonal substances.⁶⁸

Lung

Bronchial carcinoids generally fall under the category of bronchial adenomas. The latter, though infrequently encountered, comprise 6%-10% of primary tumors of the lung.⁶⁹ Almost all are accessible to bronchoscopy, and comprise 5% of all bronchial neoplasms detected by bronchoscopy.⁷⁰

Bronchial adenomas are divided histologically into two major types, cylindromas and carcinoids; the former comprise 15% and the latter 85% of the cases.⁷¹ The carcinoid variety has a histological pattern similar to the gastrointestinal carcinoids,⁷² although glandular differentiation and secretion of mucus may be more common.⁷³ The cellular origin of bronchial carcinoids is not definitely known, but it is presently believed that they are derived from the enterochromaffin system.⁷²

The carcinoid grows as a polypoid or sessile tumor involving the subepithelial tissues of the proximal bronchi, but usually not the carina or trachea. They are most common on the right side and involve the lower lobe or main stem bronchus. They are least common in the left upper lobe.⁴⁹ Most of the tumor is located beneath the surface. The tumors are frequently highly vascular, and hemorrhage may be a serious complication. Bronchial carcinoids are about equally distributed between the sexes, and most cases occur before the age of 50.⁶⁹

The bronchial carcinoid is generally less invasive than the cylindroma, with metastasis to the tracheobronchial lymph nodes occurring in only 9% of the cases and spread to the liver, vertebrae, and kidney occurring even less often.⁶⁹ The prognosis of bronchial carcinoid is considerably better than that of the cylindroma, but the former is not as innocent as once thought. In a study reported by Goodner and associates,⁷⁴ only 12 of 21 patients with bronchial carcinoids survived five years.

Sixteen cases of bronchial carcinoids associated with the carcinoid syndrome have been reported.⁷⁴ There are also reports of bronchial carcinoids associated with pluriglandular adenomatosis⁷⁵ and the secretion of other pharmacologically active (insulin-like) substances.⁷⁶

Ovary

Carcinoid tumors have been found within ovarian teratomas, although such cases are extremely rare.^{77,78} A "functioning carcinoid" in this location, with its direct access to the systemic circulation, may manifest signs and symptoms of the carcinoid syndrome without necessitating liver or large intra-abdominal involvement.

The Classic Carcinoid Syndrome

For a proper perspective of carcinoid disease, it should be emphasized that very few carcinoid tumors, including the so-called "malignant carcinoids" are associated with the carcinoid syndrome. Indeed of about 2,500 cases reported in the world literature, only about 100 were associated with the syndrome. Microscopically no differentiation

can be made between the small apparently benign carcinoid tumor, the distinctly metastatic tumor,⁷⁰ and the tumor producing the carcinoid syndrome. Since most carcinoid tumors are discovered incidentally at surgery or autopsy, it is the unique character of the carcinoid syndrome which allows preoperative diagnosis.

In 1954 Thorson and others³ enumerated the clinical manifestations of the carcinoid syndrome. These consisted of the following:

1. The presence of a "malignant" carcinoid of the small intestine with slow progression and metastasis to the liver and other intra-abdominal organs. Frequent watery stools, borborygmi, abdominal pain, and dependent edema were common symptoms. Ascites and pleural effusion were more rare.

2. Generalized dilation of the small vessels of the skin, with the presence of telangiectasis in some patients and pellegra-like cutaneous lesions in others.

3. Plethora and total or partial cyanosis in the absence of polycythemia.

4. Pulmonary stenosis of the valvular type and tricuspid regurgitation.

5. Attacks of "bronchial asthma" of a rather unusual type.

Metastasis to the liver was considered an important factor in the genesis of this syndrome, and excessive circulatory serotonin was recognized as the common denominator for the signs and symptoms. For convenience of description and discussion, the above clinical features may be divided into the following groups: (1) *gastrointestinal*; (2) *cardiac*; (3) *cutaneous-peripheral vascular*; and (4) *other clinical features*. In this section the clinical signs and symptoms of the "classic carcinoid syndrome" will be analyzed, with special reference to pathophysiology. Modifications and additions to the syndrome as outlined by Thorson³ will be made as necessary.

1. *Gastrointestinal features*

A long history of intermittent abdominal pain and discomfort with recurrent attacks of diarrhea is the principal gastrointestinal feature. The stools are watery or semi-solid, numbering as many as 20 to 30 movements a day. Tenesmus is characteristically absent,

and there is usually no blood, pus, or mucus in the stools.⁸⁰ Massive hepatomegaly, often with easily palpable tumor nodules, is produced by hepatic metastasis. In spite of the massive liver enlargement, results of the usual liver function tests remain normal.⁸¹ The hepatic metastases frequently undergo necrosis, resulting in episodes of right upper quadrant pain with fever and leukocytosis.⁸¹

Nausea and vomiting may be associated with frequent or prolonged flushing, and hyperperistalsis is often readily apparent at the bedside. There may be significant weight loss despite ascites. A frank malabsorption syndrome with steatorrhea has been reported in one case of the carcinoid syndrome.⁸² Biopsy of the small bowel, however, disclosed no mucosal abnormality.⁸³

All features of the carcinoid syndrome were originally considered to be the result of excessive production of serotonin and its metabolites, but more recently the role of serotonin as the sole mediator of some of these features has been challenged by Oates and others.⁸⁴ Although the blood levels of serotonin do not necessarily correlate with the severity of these symptoms,⁸⁵ nevertheless it is probably true that serotonin is the principal mediator of the hyperperistalsis, diarrhea, epigastric pain and cramps, nausea and vomiting, and steatorrhea, this by virtue of its neurohumoral action within the gastrointestinal tract.

Increased blood serotonin levels have also been found in some instances in patients with "functional" gastrointestinal disease.⁸⁶ These patients have many of the gastrointestinal complaints mentioned and are thought to have a disorder of indole metabolism with a deficiency in enzyme activity necessary for the degradation of 5-HT to 5-HIAA. Elevated blood serotonin levels have been seen in acute gastroenteritis, adult celiac disease, Whipple's disease, and other malabsorption states. Serotonin levels are normal in ulcerative colitis and regional enteritis.⁸⁶

Finally, an increased incidence of peptic ulcer has been reported in association with the carcinoid syndrome, but the relationship of serotonin to gastric secretion remains unclear. It is possible that elevated blood

serotonin levels causes excessive release of histamine, with resulting ulcer formation. There is no evidence for an intrinsic ulcerogenic potential of serotonin itself.⁸⁷

2. Cardiac abnormalities

Cardiac abnormalities are found in about 50% of patients with the carcinoid syndrome,⁸⁸ and are rarely seen in the absence of metastatic involvement of the liver. Long-standing and progressive exertional dyspnea, together with excessive fatigability, is the most frequent "cardiac" symptom.⁸⁴ Edema of the lower extremities may occur early in some patients, while the majority exhibit edema during their terminal months. The presence of a grade 1-4/6 precordial systolic murmur along the left sternal border, suggesting pulmonary stenosis or tricuspid insufficiency, is the only clinical feature which may distinguish patients with carcinoid heart disease from those without.⁸⁹ Chest roentgenographic findings are usually not specific for carcinoid heart disease,⁸⁹ although there may be evidence of right atrial hypertrophy.⁸⁰ The electrocardiogram likewise is usually nonspecific. Low voltage or a prominent P wave suggesting right atrial enlargement is the most frequent abnormality.

Cardiac catheterization has demonstrated that tricuspid insufficiency is the most common valvular lesion, followed in turn by pulmonary stenosis.⁹⁰ Some patients with the carcinoid syndrome, in the absence of valvular lesions, have a hyperkinetic cardiac state characterized by chronic elevation of cardiac output, low systemic A-V oxygen differences, increased stroke volume, and diminished peripheral vascular resistance.⁹¹

The pathology of carcinoid cardiac disease is unique.⁹² Focal or diffuse collections of fibrous tissue, devoid of elastic fibers, are superimposed on the endocardium of the valve cusps and ventricular chambers. Grossly the lesions appear as pearly-grey, thickened areas.

The valve cusp itself remains normal and is clearly demarcated from the fibrous tissue deposit by its external elastic membrane.⁹³ This process is usually limited to

the right side of the heart, but occasionally may be seen on the intima of the great veins, coronary sinus, or great arteries.⁹⁴ The left side of the heart is infrequently involved, usually in patients with either a patent foramen ovale or pulmonary carcinoid. Rarely has it been reported in the absence of any left-to-right shunts or lung involvement.^{88,95}

Originally it was thought that the cardiac manifestations^{91,95} were the result of high concentrations of serotonin arising from tumor metastasis with direct access to the systemic circulation—for example, ovary, lung, and particularly the liver. These locations would permit serotonin to bypass the monamine oxidase barrier in the liver or lung and allow direct contact with the right side of the heart. The relative sparing of the left heart was attributed to the inactivation of free 5-HT by MAO in the lung. If, however, the lung contained a carcinoid or if a right-to-left shunt existed, then a high concentration of serotonin could reach the left side of the heart.

In some instances there appears to be a close association between increased serum serotonin and the generalized fibrotic processes seen in the carcinoid syndrome⁹⁶ and in non-carcinoid endomyocardial fibrosis;⁹⁷ however, the pathogenesis of the fibrous plaques remains unknown. The morphology of the endocardial lesions suggests that they may represent the deposition of a collagen-like material from the blood; yet the stimulus which directly or indirectly produces endocardial fibrosis remains unknown.⁸⁹ To date it has not been possible to produce the cardiac lesion in animals by the administration of serotonin. Moreover, urinary 5-HIAA levels are similar in patients with carcinoid disease irrespective of the presence or absence of cardiac involvement. Finally, the fact that total production of serotonin is similar in patients with or without carcinoid heart disease suggest that substances other than serotonin should be considered.⁸⁹

Although there is experimental evidence in both man⁹⁸ and animals⁹⁹ that serotonin can increase cardiac output and mimic the hyperkinetic cardiac state, there have been

insufficient human clinical data to support serotonin as the sole factor responsible for this hemodynamic state.^{91,100}

Summarizing the current status of the pathophysiology of carcinoid heart disease, it may be said that hyperserotoninemia is the hallmark of carcinoid syndrome, yet serotonin alone cannot account for all of the cardiovascular manifestations described. Recent investigations have disclosed the presence of other vasoactive substances, some or all of which may be involved in the vascular phenomena of the carcinoid syndrome. These will be discussed in the following section.

As a final note, it should be mentioned that carcinoid heart disease occurs relatively late in the syndrome, with cardiac failure being the leading cause of death.⁵ It appears that the chronic burden of hyperkinemia, aggravated episodically by additional increments in cardiac output during flushing or in association with the deformity of the tricuspid and pulmonary valves, may contribute to the high incidence of cardiac failure.⁹¹

3. *Cutaneous peripheral-vascular lesions*

The cutaneous peripheral-vascular lesions are the most characteristic and consistently recognized of all the clinical features of the carcinoid syndrome. The cutaneous manifestations consist of spontaneous or induced intermittent "flushing."³ The flush occurs predominantly on the face and neck, but can vary in extent and location. It may often spread to the shoulder, trunk, or extremities during a paroxysm. Various color descriptions have been applied to the flush, including brick red, fiery red, bluish red, mottled bluish red, purplish red, violaceous, or admixtures of flushing and patchy cyanosis.⁸⁰ Microscopic examination of the skin reveals dilation and congestion of veins and capillaries, and at times thickening of the vessel walls, edema, and chronic inflammation.¹⁰¹

In addition to the paroxysmal flushing of the skin, permanent changes occur with dilation of capillaries and venules of the skin, producing telangiectasis and a permanent cyanotic appearance. These alternations oc-

cur late in the disease after the intermittent cutaneous-vascular phenomena have been present for long periods.¹⁰² The miliary or gross telangiectases are most often present on the face and lower extremities. The "peculiar cyanosis" occurs without evidence of arterial oxygen unsaturation.⁸⁰

Both the frequency and duration of the flushing paroxysm vary widely, as do the apparent precipitating factors. "The flush may be momentary or may last for days. It may persist in a mild form on the face with paroxysmal intensification and then spread to other parts of the body. Frequently there is an associated sensation of local heat, tingling or tightness of the skin, and even apparent swelling of the skin. Palpitation, tachycardia, dizziness, and superficial venoconstriction are common during attacks."⁸⁰ Hypotensive states, even syncope, have also occurred.

Although the flushing episodes occur spontaneously, they are also provoked by emotional stimuli,¹⁰³ ingestion of fatty meals,¹⁰⁴ a hot environment,¹⁰⁴ oral or parenteral ethyl alcohol,¹⁰⁵ physical exertion,⁸⁰ smoking,⁸⁰ defecation,⁸⁰ deep breathing,¹⁰⁵ abdominal, pelvic or proctoscopic examinations, and manual compression of carcinoid tumor tissue.^{28,106-109} Finally, flushing has been induced by certain drugs such as histamine,¹⁰⁷ epinephrine, and norepinephrine.¹⁰⁸ Because of the variety of methods which reproduce typical spontaneous flushing, doubt and controversy have arisen regarding the pathological physiology of the flushing phenomena as well as other features of the carcinoid syndrome.

Until the review by Robertson, Peart, and Andrews¹⁰⁹ in 1962, it was generally accepted that the facial flushes were the result of intermittent release of serotonin into the general circulation. Furthermore, it was thought that flushing could occur only if carcinoid tissue was so situated as to be drained by systemic veins, since serotonin released into the portal venous system is destroyed by the MAO in the liver. With few exceptions, however,^{109,111} it has not been possible to demonstrate elevated levels

of serotonin or its metabolites in the plasma or urine during spontaneous flushes.^{109,111} Second, severe flushing reactions have been observed in the absence of elevated urinary 5-HIAA.^{6,111} Third, the intravenous injection of serotonin in normal subjects and in patients with carcinoids does not consistently induce flushes, and the reactions produced differ qualitatively from the spontaneous flushes.^{109,111} Fourth, decarboxylase inhibitors capable of reducing serotonin synthesis, and serotonin antagonists have not been useful in controlling the flush.^{6,84} Although the fundamental biochemical abnormality of the carcinoid syndrome has been the overproduction of serotonin, the role of serotonin as the sole mediator of carcinoid symptomatology has been challenged.

The failure to implicate serotonin as the humoral agent responsible for the flushing episodes has led to an active search for other possible vasoactive substances. By using intravenous injections of epinephrine as both a diagnostic test and investigational tool to reproduce a typical spontaneous flush, the complexity of the flush reaction has been closely examined. Of all the vasoactive substances studied, interest at present is largely centered upon the kinin peptides.

The kinin peptides are highly active compounds that produce vasodilation, bronchoconstriction, stimulation of intestinal motility, and an increase in capillary permeability.¹¹² Kinin or kallidin peptides are formed by the proteolytic action of a kallikrein (kinin-forming enzyme) on a plasma alpha-2 globulin (kallidinogen or kininogen). Oates and colleagues⁸⁴ found that infusion of synthetic bradykinin in normal subjects and in patients with carcinoid disease produced hypotension and typical facial flushes. It was found that a kinin peptide similar to bradykinin was present in hepatic venous blood after injection of epinephrine in patients with carcinoid.¹¹³ It was further determined that bradykinin-induced flushes mimicked epinephrine-induced and spontaneous flushes.

It has therefore been suggested that

should the kinin peptide system be involved in flush production, the carcinoid tumor must contain the kallikrein enzyme, and epinephrine can activate or release this enzyme to act on the plasma substrate kininogen to form the vasoactive kinin. It was found indeed that metastatic lesions of the liver secondary to carcinoid tumors contain large amounts of kallikrein.⁸⁴ The lowest levels of kallikrein were noted in a patient who did not have flushes. No enzyme activity has been detected in liver tissues of non-carcinoid patients. Higher concentrations of kallikrein were found in hepatic venous blood of several carcinoid patients during catecholamine-induced flushes as compared with values prior to administration of epinephrine. In contrast, negligible amounts were present before and after epinephrine in patients without carcinoid disease.

These observations clearly implicate the kinin system in the production of the carcinoid flush. It is believed that other yet unidentified vasoactive substances might be elaborated by these tumors in some patients.¹¹⁴ For example, in a few patients there was only a minor increase in bradykinin in the hepatic vein during flushes,¹¹⁴ and in an occasional patient elevation of the serotonin level has been recorded in the hepatic venous blood.¹⁰⁹ Furthermore, there is evidence that both bradykinin and serotonin acting together may produce a modified syndrome in certain instances.¹¹⁵ Substance P, a vasodilator peptide, has also been considered important by some authors.

For the most part, then, it appears that bradykinin plays a central role in the carcinoid flush mechanism. Perhaps bradykinin contributes to other aspects of the carcinoid syndrome as well.¹¹² Since bradykinin can stimulate the smooth muscle of the bronchi and intestine, it may well be implicated in the attacks of asthma and diarrhea. The high output failure noted in some patients is consistent with the finding that in the presence of increased levels of bradykinin, peripheral vascular resistance is reduced. Finally, bradykinin is capable of altering endothelial permeability and initiating in-

flammatory reactions with proliferation of fibrous tissue. Such reactions may occur in the superficial layers of the endocardium. Some studies demonstrate a decrease in kinin levels from the hepatic vein to peripheral artery, which may explain why the most severe features of carcinoid heart disease are on the right side of the heart.⁸⁴

To complete this discussion on vasoactive substances involved in carcinoid symptomatology, one must examine the role of histamine. First, excess histamine has been demonstrated in some patients with carcinoid syndrome.¹¹⁶ Second, elevated blood or urine levels of histamine have been found in a group of patients with flushing, diarrhea, abdominal cramps, and telangiectasis without definite evidence of carcinoid tumors or systemic mastocytosis.¹¹⁷ Third, increased numbers of mast cells have been found in the telangiectatic skin of a patient with carcinoid syndrome,¹¹⁸ and mast cells contain an enzyme which is similar to the kinin-forming enzyme.¹¹⁹ Fourth, serotonin can cause release of histamine, which in turn releases catecholamines.

It can be postulated that serotonin or histamine causes the local release of catecholamines, which in turn releases kinin peptides producing the flush.¹¹⁹ The increased incidence of peptic ulcers in the carcinoid syndrome and the similar distribution of serotonin and histamine in the gastrointestinal tract suggest further interrelationships between these substances. A more complete discussion of the physiology of the vasoactive substance may be found elsewhere.^{29,112,119}

Besides the vascular cutaneous phenomena, *other cutaneous manifestations* of carcinoid disease include pellegra,^{3,120} sclerodermatous changes,¹⁰³ cutaneous metastasis,¹²¹ pruritus,¹⁰² and cutaneous melanosis.¹²²

The occasional pellagrinous features are believed to be secondary to niacin deficiency as a result of both chronic malnutrition and diversion of dietary tryptophan from protein and niacin synthesis. Normally about 1% of tryptophan is metabolized to form serotonin, and 99% is used in the synthesis

of niacin and protein. In the carcinoid syndrome, however, as much as 60% of the tryptophan may be diverted to form hydroxyindoles.²⁸

Sclerodermatous changes are mentioned infrequently in case reports; however, a closer examination of this fibrotic process may shed light upon the pathophysiology of the fibrotic changes noted in carcinoid heart disease.

The latter cutaneous manifestations mentioned have been reported in isolated instances only and probably reflect some unknown activity of the pharmacologically active substances just reviewed.

4. *Other clinical features*

Episodes resembling *bronchial asthma* are frequently noted in the carcinoid syndrome. Bronchospasm with respiratory stridor do not occur in all patients, but when present, it coincides with the paroxysms of cutaneous flushing. Serotonin, histamine, and bradykinin are all capable of producing bronchoconstriction, and this phenomenon may represent the interaction of the three.

Other less common clinical features associated with the carcinoid syndrome include *personality changes*,⁵ *neuromyopathy*,^{7,123} and *hypotensive crisis*.¹²⁴ Studies of the effects of serotonin upon the brain have led to speculations regarding its effects upon behavior. Dementia, schizophrenia, and other personality changes occur too infrequently in carcinoid patients to make these disorders an important part of the syndrome. Personality changes secondary to niacin deficiency, however, are well known.

The association between neuromuscular disorders and neoplasms is well known. It has been suggested that such disorders may be the direct effect of metabolic products of such tumors, and the carcinoid tumor is one of a number which produce active metabolic by-products. The features of the neuromyopathy described in association with carcinoid tumors consist of generalized wasting and weakness of the muscles in the extremities,¹²³ and severe spasm of the skeletal muscles of the spine.⁷⁷

Episodes of hypotension have been noted

during anesthesia, following palpation of the tumor during surgery, and during spontaneous bouts of flushing.¹²⁴ The hypotensive effect of serotonin, histamine, and kinins probably explains this rare feature.

Carcinoid Spectrum

The carcinoid spectrum includes a variety of additional features which have been recognized as "variants" of the classic carcinoid syndrome. In 1958 Sandler and Snow¹²⁵ reported a bronchial carcinoid which secreted principally 5-HTP, the immediate precursor of serotonin. Additional cases of 5-HTP secretion have been described in association with bronchial¹²⁶ and gastric carcinoids, as well as noncarcinoid tumors such as pancreatic duct neoplasms¹²⁸ and oat-cell carcinomas.¹²⁹ These atypical carcinoids consist of cells which are argyrophil-positive, but argentaffin-negative. The tumor tissue contains 5-HTP, but lacks the decarboxylase necessary for conversion to serotonin. The noncarcinoid 5-HTP-secreting tumors, unlike the carcinoids, do not seem to store 5-HTP, and hence tissue assays for 5-HTP in these tumors have been negative. In contrast, noncarcinoid tumors are both argyrophil- and argentaffin-negative.¹²⁹

Urine from patients with 5-HTP-secreting tumors contains 5-HTP, serotonin, and 5-HIAA.¹²⁵ It seems that these tumors produce an excess of 5-HTP, which then enters the circulation and is largely converted to serotonin in normal tissues which contain decarboxylase. A portion of the serotonin is then metabolized extrarenally to form 5-HIAA, which is excreted. Some of the circulating 5-HTP, however, is excreted unchanged in the urine, while some is decarboxylated in the kidney and excreted as serotonin. Increased urinary histamine reported in typical intestinal carcinoid may be a feature of 5-HTP tumors.¹³⁰

Other clinical features of 5-HTP-secreting tumors include production of a bright red patchy "geographical flush" and a tendency toward more widespread metastasis including an osteosclerotic type of skeletal metastasis.¹²⁸

Bronchial carcinoid tumors produce some

of the most striking clinical variants of the carcinoid spectrum.¹¹⁵ These variations have included:

1. Excess serotonin production in the absence of an associated clinical syndrome.¹³¹
2. Secretion of 5-HTP in addition to serotonin.^{125,126}
3. Predominance of left-sided cardiac lesions.¹¹⁵
4. Frequent association with other endocrine disorders including Cushing's syndrome¹³² and pleuriglandular adenomatosis.⁷⁵
5. Widespread metastases with frequent skeletal involvement.⁷⁴
6. Prolonged severe flushing attacks.¹¹⁵

The flushing episodes may be associated with anxiety, tremulousness, temperature elevations, periorbital and facial edema, excessive lacrimation and salivation, rhinorrhea diaphoresis, nausea and vomiting, explosive diarrhea, hypotension, oliguria, and even death.^{115,138}

The concept of a carcinoid spectrum is further broadened by the coexistence of elevated levels of serotonin, 5-HIAA, and carcinoid syndrome with noncarcinoid malignant lesions. These tumors are histologically indistinguishable from typical neoplasms of the particular organ. They include thyroid carcinoma¹³⁴ and pancreatic adenocarcinoma,^{128,135,186} pancreatic islet-cell tumor,¹³⁷ oat-cell tumor of the lung,^{129,138,189} neuroblastoma,¹⁴⁰ undifferentiated squamous-cell carcinoma of the lung,³⁷ and ovarian carcinoma.¹⁴¹ Patients with these tumors demonstrate evidence of associated endocrine hyperfunction,¹³¹ such as Cushing's syndrome,¹¹¹ and hypoglycemic states.¹³⁷

Six cases of Cushing's syndrome associated with carcinoid syndrome have been reported.¹⁴¹ Nine cases of carcinoid syndrome associated with noncarcinoid tumors were reviewed by Moertel and colleagues,¹³⁴ of which eight originated in tissues derived from the entodermal pouches of the primitive foregut—for example, pancreas, lung, and thyroid. This suggests the possibility of a stem cell common to all these tumors. Because of the association of endocrine hyperfunction in both these tumors and in bron-

Table 1

Differential Features As Related to Origin of Tumor

	Foregut (bronchi, pancreas and stomach)	Midgut (mid-duodenum to mid-transverse colon)	Hindgut (distal colon and rectum)
Histologic structure	Tendency to be trabecular; may differ widely from classical pattern	Characteristic	Tendency to be trabecular
Argentaffin and diazo reactions	Usually negative	Positive	Often negative
Association with carcinoid syndrome	Frequent	Frequent	None
Tumor serotonin content	Low	High	Not detected
Urinary 5-HIAA	High	High	Normal
5-HTP secretion	Frequent	Rare	Not detected
Metastasis to bone and skin	Common	Unusual	Common

After Williams and Sandler⁴³

chial carcinoids,¹⁴² it is possible that the production of serotonin by them represents an "unmasking of an innate biochemical potentiality" from originally biochemically totipotent cells.¹⁴³ The demonstration of increased serotonin production by some ovarian teratomas provides further support for this theory.¹¹⁹

Williams and Sandler⁴³ attempted to summarize the features of the carcinoid spectrum by grouping carcinoid tumors according to their embryonic derivations from the primitive gut. This classification, presented in Table 1, provides an excellent profile of carcinoid disease.

Other Clinical Manifestations of Carcinoid Tumors

It has been mentioned that the carcinoid syndrome develops in only a small percentage of all cases of carcinoid tumor, most characteristically those in which the primary tumor arises in the terminal ileum and lung. This section will deal briefly with the clinical manifestations of carcinoids as related to location.

The symptomatology of *gastric* carcinoid is varied and non-specific. It may simulate either gastric carcinoma or ulcer. Epigastric pain and melena are the most frequent symptoms. Others include hematemesis, weight loss, anemia, nausea, and vomiting.

The roentgenographic appearance is variable and nonspecific.¹⁴⁴ Although carcinoids are rare tumors in this location, they should

be considered in the differential diagnosis of small gastric polypoid filling defects, particularly in patients with a long history of gastric distress. The polypoid lesion is normally covered with mucosa; however, mucosal ulceration may occur with resulting hemorrhage.

Eighty per cent of *duodenal* carcinoids produce symptoms related to common bile duct obstruction or peptic ulceration.⁴² Other symptoms lack specificity, such as nausea, vomiting, diarrhea and rarely, hemorrhage. Suspicion should be aroused if x-ray studies demonstrate an obstructive lesion with no break in the mucosa.⁴²

The majority of *jejunal and ileal* carcinoids are asymptomatic. The principal symptoms which can occur are similar to those of other small bowel malignant lesions and vary with the location of the tumor in the small bowel. Carcinoid tumors should always be considered, since they are the third most common neoplasm of the small bowel, following adenocarcinoma and lymphoma. Symptoms include diarrhea with large amounts of mucus and tenesmus; cramping abdominal pain, nausea and vomiting due to obstruction; and finally weakness and asthenia secondary to chronic blood loss. Gross melena is infrequent.¹⁴⁵ An ileal carcinoid presenting the clinical and radiographic features of regional enteritis has been reported.¹⁴⁶

Appendiceal carcinoids are usually asymp-

tomatic, but the 10% that present symptoms mimic acute appendicitis.

Carcinoids within a *Meckel's diverticulum* and the *gallbladder* are generally asymptomatic and are discovered incidentally. When they are symptomatic it is usually because of metastasis.

Carcinoids of the *cecum and colon* may present symptoms like those of other large bowel tumors except that bleeding is usually absent since the mucosa covering the tumor usually remains intact. Cecal lesions produce right lower quadrant pain, a right lower quadrant mass or evidence of obstruction of the ileocecal valve. Colonic carcinoids usually present pain, mass or obstruction.

Rectal carcinoids are often asymptomatic. If symptoms are present, changes in bowel

habit, signs of obstruction, or bleeding are usually noted. The majority are located within 5-8 cm from the anus, and the diagnosis may be easily made by sigmoidoscopy and biopsy.

Pancreatic carcinoids are extremely rare. They have been generally reported postoperatively as an incidental finding, or in association with the carcinoid syndrome. The association of pancreatic neoplasms with carcinoid syndrome and other endocrine disorders should be recalled.

Bronchial carcinoids may be manifested by cough, pain, hemoptysis or repeated bouts of pneumonia. Bronchial occlusion results in atelectasis, obstructive pneumonitis, and bronchiectasis.^{147,148}

(to be concluded)

Treatment of Osteoarthritis with a Combination of Carisoprodol and Prednisolone

WALTER SPAETH, M.D., F.A.C.P.

Standard textbooks refer to clinical osteoarthritis as a symptomatic stage of degenerative changes in synovial joints. The primary sites of tissue degeneration are cartilage and bone. However, symptomatic discomforts such as aching, stiffness, and pain appear to arise primarily from the surrounding soft tissues, the joint capsule, synovium, periarticular ligaments, muscles, and tendons. This symptom complex is probably caused by traumatic inflammation secondary to loss of functional integrity of the joint associated with the pathological process occurring in the bones and cartilage. The soft tissue reaction is one characterized by fibrous contractions and muscle spasm.

Osteoarthritis may be divided into two classes: primary osteoarthritis, apparently associated with a congenital inferiority of the tissues of synovial joints; and secondary osteoarthritis, which occurs in joints having undergone accelerated degeneration as a result of such predisposing factors as obesity in weight-bearing joints, trauma, or endoc-

rine, metabolic, or neurological abnormalities.

The purpose of the study to be described was to ascertain whether by the use of carisoprodol plus prednisolone, the dosage of corticosteroid alone needed to produce relief of osteoarthritic symptoms could be reduced. This reduction in steroid dosage through the accompanying use of carisoprodol accomplished in rheumatoid arthritis by Kolodny.¹

Carisoprodol (N-isopropyl-2-methyl-2-propyl 1, 3-propanediol dicarbamate) is a muscle relaxant with associated myanalgesic activity. Relaxation of skeletal muscles is produced by decreasing the reflex excitability of the central nervous system. Peripheral nerve stimulation in an experimental animal completely paralyzed by carisoprodol results in prompt contraction of the innervated muscles, indicating that the nerve, myoneural junction, and muscles have remained intact. Carisoprodol, therefore, possesses no curare-like action. Accordingly, one can hypothesize that the basic action of the drug is depression of the synaptic junction within the central

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nervous system.² The myanalgesic action of the drug is unique in that it modifies central perception of pain without abolishing peripheral pain reflexes.² Thus carisoprodol has been widely used in the treatment of musculoskeletal disorders.³⁻⁶

Materials and Methods

All patients included in this study were selected from private practice; participation depended on a thorough physical examination and complete history, with special attention being directed to previous antiarthritic treatment, pertinent laboratory data, and x-ray examination. Tests for atrophic or rheumatoid arthritis were carried out in most of the hospitalized patients and found to be normal. The diagnosis of osteoarthritis was made when weight-bearing joints or traumatized joints were involved in older patients and x-ray changes supported the diagnosis.

Because a corticosteroid was to be used, special consideration was given to the possibility of adverse reactions in those patients manifesting altered glucose metabolism or hypertension. Any persons with these conditions were excluded from the study.

The drugs used were tablets containing 350 mg of carisoprodol combined with 2 mg of prednisolone,* and tablets containing 4 mg of prednisolone alone. These tablets were identical in size and shape and offered no identifying characteristics. Adequate amounts were supplied for each individual in randomly numbered bottles, which were assigned sequentially as each new patient entered the study. The identification code for this double-blind study was kept sealed until the end of the study. At no time was it known whether a patient was receiving prednisolone or the combination tablet of carisoprodol and prednisolone.

Of the total of 78 patients included, 39 were assigned randomly to the carisoprodol-prednisolone group and 39 to the control (prednisolone only) group. Female patients outnumbered males by almost 2 to 1. The average age of the patients in both groups

was 62 years. Seventy-three were Caucasian. Thirteen were hospitalized upon admission to the study; the rest were treated as outpatients.

The two groups were well matched for these and all other demographic and historical parameters, inclusive of initial symptomatology. The diagnosis in all cases was osteoarthritis. Affected joints varied widely and included vertebral bodies, large peripheral joints, and phalangeal joints. Previous therapy in this group, which has consisted mainly of salicylates (60 patients) and home heat remedies (47 patients), had offered only slight relief to most patients.

Seven factors were evaluated for response to therapy: stiffness of joints, duration of morning stiffness, number of hours before onset of daily fatigue, insomnia due to pain, limitation of motion of joints, pressure pain from palpitation in muscles surrounding the joints, and the patient's general feeling of well-being. A detailed patient-evaluation form designed to elicit these and other data was completed in every case. A numerical coding of 0 to 4 was used to rate severity of each factor.

During the first week of treatment each patient received one tablet (of either of the medications) after each meal and two tablets at bedtime. If signs and symptoms were not moderately improved when the patient was re-evaluated at the end of seven days, the dosage was increased to eight tablets daily, two after each meal and two at bedtime. However, no patient was maintained at the latter daily dosage for more than seven days.

If, after the initial week of therapy consisting of five tablets daily, the patient experienced marked relief of symptoms, the medication was gradually reduced to effect discontinuation within seven to ten days. (Because of the presence of prednisolone in both drugs, it was decided to reduce the dosage gradually rather than suddenly to terminate therapy, to reduce the possibility of recurrence of symptoms.) If the dosage had been increased to eight tablets daily during the second week because of an unsatisfactory initial response, the drug was gradually

*SOMACORT, Wallace Pharmaceuticals, Cranbury, New Jersey.

withdrawn, regardless of response at the end of two weeks, to bring about complete termination of therapy within 7 to 14 days.

At each return visit a routine blood count, urinalysis, and blood pressure reading were obtained from each patient. Special attention was given to evidence of glycosuria as an indication of altered glucose metabolism by prednisolone. If indicated, a blood sugar value was obtained two hours postprandially. If a significant rise in blood pressure occurred, a study of blood electrolytes was made.

Results

Final evaluation of overall or global response to each of the therapies revealed that of 39 patients taking the combination of carisoprodol (350 mg) and prednisolone (2 mg), 17 obtained complete relief, 19 marked relief, 2 moderate relief, and 1 slight relief. In the group of 39 patients receiving 4 mg of prednisolone as the sole treatment, 17 obtained complete relief, 20 marked relief, and 2 moderate relief of symptoms. Thus, little difference was apparent from this type of comparison of the two groups. Nevertheless, the excellent response in both groups was in sharp contrast to the poor relief previous therapy had afforded these patients.

Improvement of the patients was also measured according to more specific terms; namely, the response of five symptoms, each of which was present at the start of the study in almost every patient: morning stiffness, insomnia due to pain, limitation of motion, muscle pain, and decreased feeling of well-being. The comparative responses are shown in Table 1, where it is seen that results were quite similar in the two groups.

Finally, patients were asked at the outset and during the study, how much time elapsed between arising and the disappearance of morning stiffness, and between awakening and the first feelings of fatigue during the day. On the average, seven hours was the time required for stiffness to disappear before the study started—that is, most patients had this discomfort most of the waking day. But at the end of the study the average duration of morning stiffness was reduced to less than one hour (0.8

Table 1
Comparison of Symptomatic Responses*

Symptom	Prednisolone	Prednisolone 2 mg + Carisoprodol 350 mg
	4 mg (% Cases)	(% Cases)
Morning stiffness	60%	59%
Insomnia (due to pain)	67%	64%
Limitation of motion	51%	56%
Muscle pain	64%	63%
Decreased feeling of well-being	67%	65%
*Decrease in severity		

hour) after arising in patients of both drug groups. A corollary to decreased duration of morning muscle stiffness was the increased length of time between awakening and the onset of fatigue. While this period was only 3.8 hours in these patients at the start of the study, it increased to 7.7 hours for patients of both groups after treatment.

These findings, together with the data presented in Table 1, lend ample objective confirmation to the rate of global response obtained, inasmuch as symptoms responded with almost equal rates of success to each of the two drugs.

After completion of the study one important fact had to be determined. In every instance when the response to the initial week of therapy had not been considered satisfactory, the dosage had been increased by the same increment. If tabulation of case records were to reveal that a far greater percentage of patients in the group receiving carisoprodol with prednisolone required increased dosage than those in the group receiving only prednisolone, the assumption could be that carisoprodol was not a significant factor in achieving a therapeutic response in these patients. (It should be noted again that each carisoprodol-prednisolone tablet contained one-half the amount [2 mg] of the steroid that was contained in the "prednisolone alone" tablet [4 mg].)

As it turned out, examination of case records revealed that in the carisoprodol-prednisolone group, 35 of the 39 patients (89.7%) required higher doses, while in the prednisolone group 32 of 39 (82.1%) also required

Table 2

Effect	Side Effects Mentioned by Patients	
	Prednisolone	Prednisolone 2 mg + Carisoprodol 350 mg
	4 mg. No. Cases	No. Cases
Drowsiness	1	6
Nervousness	—	2
Depression	—	2
Vertigo	1	2
Dizziness	—	1
Nausea	—	1
Palpitations	—	1
Headache	1	—
Restlessness	1	—
"Fullness in ears"	1	—
Substernal burning	1	—

augmented doses, obviously a trivial difference. It is apparent that the prednisolone dose in the combination tablet elicited an effect equivalent to that obtained from twice the dose of prednisolone alone. Yet it remains to be determined whether this reduced steroid intake was a function of the addition of carisoprodol. These preliminary results suggest further study of the drug's effects over longer periods and in patients for whom minimum steroid requirements have already been established, and in other conditions as well.

Side effects were reported in 11 patients who received prednisolone plus carisoprodol (drowsiness primarily) and in 6 patients who received prednisolone only. The side effects listed in Table 2 were of minor consequence. The light vertigo reported by two patients was transient and seemed to be associated merely with change in position; two patients who stated that they had become depressed during the study had had repeated episodes previously (in one case the depression disappeared even though the dose of prednisolone was increased). Palpitations in one patient were noticeable but hardly troublesome. In none of these instances was it necessary to consider removing the patient from the study.

The study was prematurely concluded in only two patients, both in the group receiving prednisolone only. One, a 70-year-old white woman who had obtained complete re-

lief of symptoms, developed lower gastrointestinal tract bleeding while the dose was being reduced. Complete gastrointestinal roentgenograms and sigmoidoscopic examination did not reveal the site of bleeding. Bleeding recurred one year later while the patient was not taking any medication, and again the focus could not be ascertained. The second patient, a 63-year-old white female who was hospitalized at the time she was selected for the study, developed hypernatremia during the second week of therapy. Sodium levels returned to normal upon reduction of steroid dosage.

Case Reports

Two typical cases are presented. Each of these patients was in the group that received the drug containing 350 mg of carisoprodol plus 2 mg of prednisolone.

Case 1 (Study case 9)

A 52-year-old white farmer complained of pain of several weeks' duration in the lower thoracic and lumbosacral areas. Upon arising in the morning, he was aware of stiffness in the lower part of his back, which would require approximately one hour to disappear. Attempts at his daily farm labor would produce pain in the lower part of his back, and he would be aware of fatigue two hours after beginning work. Marked discomfort resulted when he drove his tractor, and pain and stiffness developed when he bent over. The patient was awakened several times each night with aching of the lower back. He admitted that he did not enjoy farming any longer.

Physical examination revealed lower thoracic and lumbosacral paravertebral muscle spasm and tenderness. Stiffness was also within normal limits. Roentgenograms of the spine revealed typical osteoarthritic lipping and spur formation of the lumbosacral vertebrae.

The patient was started on a regimen of Somacort, one tablet after each meal and two tablets at bedtime. One week later the seven parameters were reevaluated and revealed only moderate improvement. Dosage was increased to two tablets after each meal and two at bedtime. After a week on this schedule improvement was marked. He was enthusiastic over his response and stated he was able to work almost the entire day without fatigue or discomfort. Insomnia due to pain had disappeared. Examination revealed no residual paravertebral muscle spasm, pain, or stiffness. Repeat laboratory studies were not remarkable. His therapy was gradually reduced and stopped in 14 days. No symptoms recurred. The only side effect reported was transitory drowsiness which disappeared as treatment continued.

Case 2 (Study case 29)

A 46-year-old white female schoolteacher complained of aching in her hands; there was fusiform swelling of the distal phalangeal joints. Her symptoms were causing her to have difficulty in writing on a blackboard in her classroom. She also had found it necessary to stop playing the piano, a pastime which she had enjoyed as recreation. Previously there had been little response to salicylates, heat, and vitamins. The Somacort was prescribed according to the usual schedule, and one week later only moderate relief was noted. Because laboratory values and blood pressure had remained normal, her dosage was increased to two tablets after each meal and two at bedtime. Seven days later marked symptomatic relief was evidenced. Classroom duties were no longer painful and she was able to play the piano without stiffness or difficulty. No change in phalangeal deformity was noted. No side effects were observed by the patient.

Summary and Conclusions

Seventy-eight patients with symptomatic osteoarthritis were randomly divided into two groups. One group received prednisolone in 4-mg tablets, and the other received a combination of carisoprodol (350 mg) and prednisolone (2 mg) (Somacort), in a double-blind study. The dosage was the same for the two groups—five tablets daily the first week, increased to eight tablets daily if moderate improvement was not noted after seven days.

The equally favorable results obtained in both groups, despite the halved steroid dose in the latter group, may indicate that carisoprodol allows a reduction in the amount of prednisolone required to relieve symptomatic

exacerbations of osteoarthritis. This preliminary evaluation suggests the need for more elaborate studies designed to answer the specific question: Once minimum prednisolone requirements have been established, will the addition of carisoprodol, as in Somacort, permit a reduction in the steroid dosage?

It should be emphasized that this form of therapy in osteoarthritis should be of short duration and used only for acute exacerbation of symptoms. If relief is not prompt, it is unlikely that continuation of treatment will produce results. As is the case with the use of any corticosteroid or corticosteroid-containing drug, caution should be exercised in the treatment of individuals with hypertension, and the drugs should not be used at all in patients with diabetes mellitus. Careful laboratory supervision is essential.

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An Unusual Case of Digital Ischemia

LYNDON K. JORDAN, M.D.

Fewer points are made with such force to emergency-room neophytes or first-year surgical and orthopedic residents as the absolute tragic results of inadvertently including epinephrine in the choice of local anesthetics for digital nerve blocks. While such preparations are of definite value in alleviating trauma pain as well as bleeding in sites of superficial lacerations other than fingers, the resulting ischemia and subsequent necrosis of the injected finger is far better prevented than treated. A more effective

and safe way of achieving a bloodless field would be to use a rubber band as a tourniquet at the base of the digit.

Various measures have been taken in emergency rooms to prevent the utilization of local anesthetics containing adrenalin for digital blocks. These have ranged from various double- and triple-check procedures, to complete banishment of such products from drug cabinets. The following case represents an unusual source and cause of digital ischemia and the various ways tried to alleviate it.

Case Report

A 19-year-old female dental assistant re-

ported to her local hospital emergency room complaining of numbness, pain, and blanching of her right index finger. She gave a history of having avulsed the very tip of the finger while cleaning dental instruments. She stated that she had evidently cut one of the small digital arteries, inasmuch as there was considerable bleeding. She reported that she had often seen her employer apply aqueous epinephrine in a 1:1,000 dilution to bleeding points during oral surgery and had prepared a small pledget of this solution, which she taped to the tip of her right index finger. The bleeding stopped immediately; however, within ten minutes she observed that her entire index finger was painful, numb, and bloodless. Two hours later she was in acute pain and sought medical help.

Examination of the finger revealed the small epinephrine compress that had been applied to the avulsed tip and a 5 by 5 ml defect in the skin. It was observed that she was right-handed. The finger was indeed bloodless, and no blood could be expressed from the tip. The area of obvious ischemia extended to the base of the index finger and did not involve the hand. Pulsations in the nail-bed of the other fingers were normal, as was the radial pulse.

The finger was immediately immersed in warm water in order to bring about vasodilation. This procedure failed to produce any significant increase in blood flow into her finger. Next, she was placed in the supine position and given several inhalations of amyl nitrite. This caused immediate reduction of her peripheral blood pressure to shock levels, owing to the profound systemic vasodilation. However, her finger remained bloodless.

At length, 5 ml of a 0.1% solution of phentolamine (Regitine) was infiltrated circumferentially at multiple points about her finger, and instantly arterial blood began spurting from the avulsed tip. The finger was dressed in the usual manner with a small pressure dressing, and subsequent healing was without remark.

Physiology and Pharmacology

Epinephrine and norepinephrine have profound vasoconstrictive effects on arterioles other than those located in striated muscle. Specifically, these agents tend to cause an intense contractile effect on the smooth muscle fibers which extend circumferentially about arterioles. Injection of epinephrine is followed immediately by an appreciable degree of diffusion throughout the local tissues, and this brings the drug within the area of supplying arterioles. In the case of a digit, the intense vasoconstriction is immediate and permanent, since no ambient blood flow is present to wash away the epinephrine.

The effect of thermal warming of an extremity or digit is well known to cause superficial vasodilation. This effect, however, was pre-empted in this case by the presence of epinephrine.

Amyl nitrite has a direct effect on smooth muscle encircling arterioles, causing immediate, temporary vasodilation. Such an effect, however, was negated in this instance by the presence of epinephrine.

Phentolamine, however, has a temporary adrenolytic action on smooth muscle fibers. By infiltrating this agent into the ischemic finger, a small degree of blood flow was established, which eventually flushed the finger of all accumulated epinephrine and restored normal circulation.

Summary and Conclusion

An unusual case is presented in which epinephrine was applied to a fingertip injury, causing immediate, total ischemia of the digit. Three methods were used in an effort to achieve vasodilation. However, only one, the use of phentolamine (Regitine) was found to be effective in this case.

In conclusion, it should be pointed out that there are means of infiltrating digits with epinephrine other than the injection of epinephrine anesthetic preparations for local nerve blocks. The most expeditious way of restoring circulation, should this occur, is the infiltration of the digit with Regitine.

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OCTOBER, 1969

THE FALL EXECUTIVE COUNCIL MEETING

President Beddingfield bowed to the in-
evitable and divided the regular business of
the fall meeting of the Executive Council
into two sessions, the second to be devoted
to reports of the committees and commis-
sioners. By this means the committee reports
will get more thorough consideration than
they would at the end of an overlong day.

Mrs. A. J. Crutchfield, Auxiliary presi-
dent, reported that there are 56 Auxiliary
chapters in 74 counties, with a total mem-
bership of almost 2700 ladies; individual

units range from 4 members in Hoke County
to 308 in Mecklenberg. A host of projects
are under way, including programs on drug
abuse which are available to a variety of
interested groups, not the medical profes-
sion alone. In March, 1970 the Auxiliary
will sponsor a legislative trip to Washington,
during which members will meet North
Carolina Congressmen, and will hear a
speech by Mrs. Dorothy Elson, Treasurer of
the United States; details will soon be sent
to members.

The Finance Committee report reflects
a balanced budget and notes that there have
been fewer than the usual number of resig-
nations from the Society, despite the dire
predictions of some people as to the effect
of the dues increase for building the Head-
quarters structure; the Society has grown
in size significantly during the year past.
The land bought some years ago by the So-
ciety for a headquarters building, near the
Raleigh-Durham airport, has been placed on
the market and should sell at a considerable
sum over its initial cost. The recent zoning
actions in the area would not permit the
building of our headquarters there, even if
we wanted to. Timber on the property will
be sold before the land is sold, which is per-
missible since only industrial use will be
made of the property.

Bids for the construction of the Head-
quarters building will be opened on October
30, and construction should begin shortly
thereafter. Since the House of Delegates
authorized the construction of a two-story
building with foundations suitable for later
expansion to four stories, costs are increased
for the additional footings, which now neces-
sitate pile driving. Tenants are being sought
for the second story of the building, with oc-
cupancy expected in mid-1971.

The Society will seek membership with two
groups whose annual dues are small, and who
deal with matters of interest to medicine.
The first is the North Carolina Citizens As-
sociation, an organization which is a sort
of state Chamber of Commerce; it is headed
by Mr. Edward Rankin, formerly chief of
administration for the state. Members
closely watch the state budget and monitor

the way in which legislative intent is carried out, reporting on these matters in a very useful publication which would accrue to a membership. The second is the North Carolina Consumer Council, which was organized two years ago. Despite a small budget, this group has already exerted great influence on legislation, being instrumental in the establishment of a consumer division in the Attorney General's office. Although some of the medical positions it has taken are contrary to Society views, it is hoped that through membership we can make our position clear and have our voice heard in such an action forum.

Medi-Card, Inc., a national medical financing service, notified the Society of the way in which it operates, and plans to exhibit at the next annual meeting as well as to advertise in this JOURNAL. It did not seek endorsement, and the Executive Council took no position on the organization; the AMA has acted similarly. Briefly, credit cards have been frowned upon for use in paying doctor's bills, because the general purpose credit cards supply users with lists of people and places who accept the cards, which would be considered advertising in the case of physicians. Medi-Card publishes no lists. A person who wishes to become a subscriber undergoes credit investigation and, if accepted, is issued a card which states how much credit he has; the holder pays nothing for the card. A physician can accept the card or not, as he wishes. If he does accept the card, his bill, less 4½%, is paid within 10 days. The card holder is billed monthly, and pays no premium if he remits within 25 days. If he pays later the interest varies with the state. Medi-Card will not sue the patient except in cases of outright fraud on the part of the card holder, and collection policies will in general be those already employed by medical collection agencies, and without exploitation of physician services as such.

Many physicians were concerned during the summer when newspapers across the state carried ads paid for by chiropractors soliciting students for a training program

for chiropractic assistants to be conducted at the Bladen Technical Institute, a public institution. After considerable work on the part of the President and other Society members exploring many avenues, the problem was satisfactorily solved when the Bladen Technical Institute decided to enlarge the scope of the program to one preparing professional office assistants who would be grounded in such matters as reception room techniques and bookkeeping, and could work for a variety of professional people; the program was renamed as well.

With the passage of legislation permitting the establishment of professional corporations, the Society has been pressed to endorse a number of people and firms who are interested in helping establish such corporations. The Society takes no position in the matter, which is strictly the business of each member. However, the Annual Meeting may well offer speakers dealing with the field. The State Bar Association will be sponsoring a program to educate lawyers on the meaning of the new legislation, and no doubt ample counsel will soon be available.

DRINKERS—STICK TO WHISKY?

With the first cases of Schlitz beer coming off their new production lines in Winston-Salem, North Carolina is back in the big leagues of beer production. The amounts to be turned out annually are staggering (136,400,000 gallon per year) and it is obvious that a lot of people are going to be awash in suds on more than one occasion during a given year. At the risk of making the Chamber of Commerce mad, physicians might do well to remember an interesting piece of work published an unfashionable length of time ago, in which Fearnley and his colleagues compared the effects of various alcoholic libations on blood fibrinolytic activity (*Lancet* 1:184, 1960), since we would all probably agree that clots are often undesirable.

During the course of measuring blood fibrinolytic activity, Fearnley's group accidentally found that a small amount of beer profoundly depressed the values—that

is, the blood took a lot longer to lyse a clot than before the friendly glass was consumed. The same prolongation—nearly 300%—took place after beer, hard cider and white wine were drunk. In ten of fourteen people who drank a pint of beer the lysis time showed this great prolongation, and in three there was a slight increase. Tests with gin, whisky and pure grain alcohol showed no effect on the lysis time. Apparently something produced during fermentation, but lost in distillation, had the noxious effect. The subjects of the study were used to drinking beer, hence the fibrinolytic activity would not seem to be restored if one persisted in the habit.

Beer being touted as the drink of the "now" generation, there is the hope that those whose fibrinolysins are depressed will generally not be the group suffering the dangers of coronary and cerebral artery thrombi, or varicose veins. But let the work serve as a warning to those whose hair, chest and rump are falling, and whose veins are swelling. Even though the state has no distilleries, if drinking goes on into senescence it might best shift to the imports; at least the state owns the stores.

Correspondence

VITAMIN A FOR CHRONIC CYSTIC MASTOPATHY

To the Editor:

While serving a fellowship at the Cancer Clinic of George Washington University Hospital in 1952, I observed patients who were given vitamin A for chronic cystic mastopathy. For the past 17 years I have used this treatment in a group of patients with a history of significant loss of breast volume after nursing; and subsequent, tender, "lumpy" breasts with clinical and or histologic diagnosis of "mammary dysplasia."

Additional history often revealed brittle nails, night blindness and or nocturnal photosensitivity, and occasional weight loss. These patients have often had dramatic response to vit A 150,000 to 200,000 units daily for 1-2 months.

The relationship of vit A to the integument and night vision is established. Nails are modified skin, while the breast is a "modified sweat gland," thus related to integument.

The psychological aspect of reassurance regarding breast cancer with relief of breast discomfort is often dramatic and gratifying.

Have any of your readers had similar clinical experience?

J. LEE SEDWITZ, M.D.

Zebulon

* * *

U. S. P. COMMEMORATIVE STAMP

To the Editor:

The United States Pharmacopeia came into being 150 years ago as a result of action at the local level in the medical society of the County of New York. Ever since 1820, the United States Pharmacopeia and physicians have had a mutually beneficial relationship. The U. S. P. Committee of Revision is dependent upon its medical specialists for selection of the drugs to be recognized in the Pharmacopeia; the U. S. P. then provides pharmaceutical standards for those drugs, thereby assuring physicians of their quality, strength, and purity. U. S. P. standards are enforced by the federal Food and Drug Administration, thereby making this a unique model of cooperation between the professions, government, and industry.

As in 1820, we are once again appealing to the medical profession. We are seeking to obtain the issuance of a commemorative stamp. Such a stamp would not only commemorate the founding of the Pharmacopeia, honor the medical and pharmacy professions, but it would also bring to public attention the existence of this voluntary cooperative effort between government, industry, and the professions. I believe this to be especially important at this time.

I would appreciate your informing the physician readers of your publication of this opportunity and urge them to write to their congressmen requesting such a commemorative stamp.

JOSEPH G. VALENTINO, ESQ.
Executive Assistant
U. S. Pharmacopeia

Monthly Perinatal Mortality Report

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹: NORTH CAROLINA,
JULY 1969 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE					NONWHITE					COUNTY	WHITE					NONWHITE				
	PERINATAL DEATHS		Total Deliveries August 1968 - July 1969	Perinatal Rate Per 1,000 Deliveries	July 1969	PERINATAL DEATHS		Total Deliveries August 1968 - July 1969	Perinatal Rate Per 1,000 Deliveries	July 1969		PERINATAL DEATHS		Total Deliveries August 1968 - July 1969	Perinatal Rate Per 1,000 Deliveries	July 1969	PERINATAL DEATHS		Total Deliveries August 1968 - July 1969	Perinatal Rate Per 1,000 Deliveries	
	July 1969	August 1968 - July 1969				July 1969	August 1968 - July 1969					July 1969	August 1968 - July 1969				July 1969	August 1968 - July 1969			
NORTH CAROLINA	172	1915	67284	28.5	134	1390	27075	27.9													
ALAMANCE		35	1309	26.7	3	25	427	58.8	PENDER	2	8	139	5.7	1	7	140	4.3				
ALEXANDER	1	11	296	37.5		5	39	-	PERQUIMANS		1	49	-		2	50	-				
ALLEGHANY		4	126	-			2	-	PERSON	1	7	248	28.2	1	10	165	60.6				
ANSON		6	156	38.5	3	17	481	61.2	PITT	3	21	736	28.8	4	30	656	45.6				
ASHE	1	14	287	48.8			3	-	POLK		4	140	-		4	32	-				
AVERY	1	9	235	38.3			4	-	RANDOLPH	2	22	1210	18.2		7	157	49.6				
BEAUFORT	1	12	395	30.4		14	240	62.6	RICHMOND	1	14	488	29.7	2	14	263	49.8				
BERTIE		2	102	-	1	12	269	44.6	ROBERTSON	1	17	594	28.6	8	64	1378	46.4				
BLADEN		7	239	29.3	1	11	199	65.3	ROCKINGHAM	3	36	1004	35.9	1	41	451	48.7				
BRUNSWICK		6	282	27.3	1	5	152	31.9	ROWAN	7	34	1147	29.6	2	16	325	49.2				
BUNCOMBE	5	68	2090	32.5	2	11	256	43.0	RUTHERFORD	3	22	741	29.7	1	9	133	67.7				
BURKE	29	1045	3008	34.7		3	84	-	SAMPSON	2	14	391	35.8	3	26	349	74.2				
CABARRUS	4	33	1053	31.3	3	14	285	49.1	SCOTLAND	1	12	305	49.3	2	13	254	51.2				
CALDWELL	8	42	1136	37.0	1	5	88	-	STANLY	6	30	634	47.3	7	136	31.6					
CAMDEN		1	51	-		1	37	-	STOKES	1	11	309	35.6		1	47	-				
CARTERET	4	13	534	24.3		2	79	-	SURRY	4	29	919	31.6		5	63	-				
CASWELL		5	157	31.8		10	172	88.1	SWAIN		2	103	-		1	36	-				
CATAWBA	2	33	1469	22.4	1	10	231	48.7	TRANSYLVANIA		11	308	78.1		1	15	-				
CHATHAM		4	333	-		7	161	38.7	TYRRELL			26	-		3	26	-				
CHEROKEE	1	4	308	-		2	15	-	UNION	3	23	684	33.6	2	9	299	30.1				
CHOWAN		1	88	-		5	89	-	VALE		11	313	30.1	3	43	381	60.4				
CLAY	1	3	85	-					WAKE	5	76	307	24.9	7	64	1209	52.0				
CLEVELAND	4	31	954	32.6	1	21	431	49.7	WARREN		2	74	-		1	7	156	44.9			
COLUMBUS	2	14	555	25.2	1	13	227	39.8	WASHINGTON	1	5	118	45.4	4	11	106	66.3				
Craven	2	29	1200	24.2		22	362	60.8	WAYNE	13	59	261	26.1			4	-				
CUMBERLAND	15	123	3700	33.5	7	61	1322	46.1	WILKES	2	20	1084	19.4	5	32	540	59.7				
CURRITUCK			56	-		2	34	-	WILSON	2	20	752	26.6			50	-				
DARE			115	-			9	-	YADKIN	1	11	550	20.0		1	63	603	47.0			
DAVIDSON	5	42	1481	29.4	2	9	254	36.9	YANCEY		11	371	18.6		1	32	-				
DAVIE		9	276	32.6	5	63	-				4	402	-		1	2	-				
DUPLIN	1	9	359	25.1	2	14	269	48.4	CITIES												
DURHAM	27	1470	1804	33.8	3	38	891	43.6	City totals are also included in county totals												
EDGECOMBE	2	12	456	26.3	1	23	505	48.8	ALBEMARLE	1	5	168	29.8		2	9	64	-			
FORSYTH	7	71	2752	25.8	4	71	1144	85.1	ASHEVILLE	2	24	744	32.4	2	10	227	44.1				
FRANKLIN	2	6	183	32.8	2	15	242	62.0	BURLINGTON		12	563	12.7	1	8	123	65.6				
GASTON	9	76	2468	30.8	5	44	476	80.4	CHAPEL HILL		7	317	10.1		5	56	-				
GATES			32	-		5	89	-	CHARLOTTE	8	73	2196	33.0	16	74	1433	41.6				
GRAHAM		3	97	-			13	-	CONCORD	2	16	214	46.3	1	6	94	-				
GRANVILLE	1	8	221	36.2		25	356	70.2	DURHAM		17	968	17.6	2	14	773	44.9				
GREENE		2	91	-	1	9	138	66.2	FORN		7	349	26.7		5	86	-				
GUILFORD	10	115	3748	30.7	4	82	1578	50.0	FLATFORTH CITY		5	170	10.9	2	4	86	-				
HALIFAX	1	6	394	15.2	4	28	600	46.7	FAYETTEVILLE	2	38	1014	37.5	4	28	563	49.7				
HARNETT	2	24	575	41.7	13	343	40.2		GASTONIA	2	26	818	31.8	3	10	206	48.8				
HAYWOOD	1	26	700	37.1	2	21	-		GOLDSBORO	2	7	321	21.8	4	16	250	61.8				
HENDERSON	1	27	707	38.3	1	41	-		GREENSBORO	2	46	1773	25.9	3	14	934	47.0				
HERTFORD		1	123	-	2	20	243	80.3	GREENVILLE		10	324	20.9	8	204	36.9					
Hoke		3	120	-		10	227	44.1	HENDERSON		4	141	47.6	1	10	171	56.6				
HYDE			42	-		2	49	-	HICKORY		4	359	16.7	1	2	109	50.6				
IREDELL	2	32	949	33.7	1	22	314	70.1	HIGH POINT	2	26	798	32.8	1	24	421	57.3				
JACKSON		5	274	18.2			51	-	JACKSONVILLE		11	433	14.9	3	52	-					
JOHNSTON	3	26	764	34.0	4	17	290	88.6	KINSTON		3	260	-		15	233	64.4				
JONES		1	61	-		3	69	-	LENOIR	1	4	202	20.7		2	44	-				
LEE		6	400	15.0	1	9	164	64.0	LEXINGTON	2	8	289	31.1	1	3	84	-				
LENOIR	1	13	565	23.0	23	449	51.2		LIVESTON		5	271	22.3	4	15	193	80.0				
LINCOLN		21	518	40.6		5	93	-	MOORE	1	6	147	40.8	2	4	78	-				
MCDOVELL	2	22	538	40.8			34	-	NEW RHY		4	175	-		6	118	50.9				
MACON	1	6	203	29.6			7	-	RALEIGH	3	61	1555	20.4	5	41	414	66.8				
MADISON	1	8	228	35.1			3	-	REIDSVILLE	2	7	154	48.6		4	106	-				
MARTIN		9	197	45.7	1	17	457	86.1	ROANOKE RAPIDS	1	5	185	10.3			41	-				
McKENNENBURG	11	109	4767	22.9	14	87	2119	41.2	ROCKY MOUNT E			115	-		9	144	85.0				
MITCHELL		4	205	-			3	-	ROCKY MOUNT N	1	3	220	-		11	97	-				
MONTGOMERY	1	4	254	-	4	5	118	42.9	SALISBURY		7	213	37.9	1	8	129	60.6				
MOORE	1	20	509	33.2		10	247	44.1	SANDHURST		5	174	24.4	1	3	71	-				
NASH	1	9	521	17.2	4	18	493	86.8	SHELBY		7	219	30.6		6	120	60.0				
NE. HANOVER	2	35	1122	31.2	1	15	414	36.0	STATESVILLE		10	254	33.4	1	10	140	71.4				
NORTHAMPTON			98	-	1	17	283	60.1	THOMASVILLE		9	188	47.8	1	4	103	-				
ONSLOW	3	55	2114	26.0	3	21	428	49.1	WILMINGTON	1	19	573	32.8	1	12	366	37.1				
ORANGE		23	684	26.0	2	10	227	44.1	WILSON		1	6	289	20.8	1	16	289	56.7			
PAMLIC	2	3	76	-	1	4	57	-	WINSTON SALEM	3	29	1439	10.0	4	58	1079	62.0				
PASQUOTANK	1	7	301	23.3	2	11	172	64.0													

¹Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}}$ x 1000

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

Bulletin Board

COMING MEETINGS

Southern Medical Association, Sixty-third Annual Meeting—The Marriott Motor Hotel, Atlanta, Georgia, November 10-13.

Southern Chapter, American College of Chest Physicians—Regency Hyatt House, Atlanta, Georgia, November 10-13.

North Carolina Chapter, American Academy of Pediatrics, and the North Carolina Pediatrics Society The Carolina, Pinehurst, November 21-22.

NEWS NOTES FROM THE

DUKE UNIVERSITY MEDICAL CENTER

Dr. Thomas D. Kinney, chairman of the Department of Pathology at Duke University Medical Center, has been appointed to the newly created position of Director of Medical Education at Duke.

In establishment of the directorship of medical education, Duke has dropped its title of Dean of the School of Medicine. It is part of a series of organizational and title changes that have taken place during the year, one of which was the elevation of former Dean William G. Anyan to a new position designated as Vice President for Health Affairs in June.

As director, Dr. Kinney will be responsible for all educational programs in the School of Medicine and the Medical Center except those of the School of Nursing, and will report to Dr. Anyan, who will retain responsibility for budget and space control.

The move also brought about title changes for associate and assistant deans in the School of Medicine. Those persons and their new titles are:

—Dr. Suydam Osterhout, who was promoted from assistant dean to associate director, admissions.

—Dr. E. Croft Long, associate director, undergraduate medical education.

—Dr. Morton D. Bogdonoff, assistant director, graduate medical education.

—Dr. William DeMaria, assistant director, continuing education.

—Dr. Helen Kotin, assistant to the vice president, research coordination.

Dr. Kinney's association with Duke dates from the early 1930s. He received his bachelor's degree at the University of Pennsylvania and then studied medicine at Duke, earning his M.D. degree in 1937.

His early teaching years were at Yale, Boston University, Tufts, and Harvard. In 1947 he joined the medical faculty at Case-Western Reserve University where he was professor of pathology until he came to Duke in 1960 as chairman of the Department of Pathology. In 1967 he was named the first R. J. Reynolds Tobacco Co. Professor at Duke.

Dr. Kinney is editor of the "American Journal of Pathology," the official monthly publication of the American Association of Pathologists and Bacteriologists. He is a member of numerous medical organizations and professional societies relating to his specialty

and is past president of the American Association of Pathologists and Bacteriologists.

He is principal consultant in pathology for the National Institute of General Medical Sciences of the National Institutes of Health, and is chairman of the Advisory Council on Pathology of the U. S. Veterans Administration. He is a member of the committee on pathology of the National Academy of Sciences, National Research Council, and is vice-president of Universities Associated for Research and Education in Pathology.

Dr. Kinney has been active in developing medical education. He participated in the development of Duke University's new M.D.-Ph.D. Program and the new curriculum that has been widely praised by the medical profession. During the past year he helped organize and served as chairman of the National Conference on Graduate Medical Education which was sponsored by the Council of Academic Societies of the Association of American Medical Colleges. He is a member of the Executive Council of the Association of American Medical Colleges and past president of the Council of Academic Societies.

* * *

Duke Hospital has appointed a new assistant director.

He is Oscar R. Aylor, who recently completed his master's degree in hospital administration at the University of Alabama. His administrative responsibility includes operation of Duke's outpatient department, emergency room, and other out-of-hospital activities.

Aylor replaces Howard Veit, who left the medical center in April to take a research position with the Department of Health, Education and Welfare in Washington.

Specially trained in rehabilitation facility administration, Aylor served his administrative residency at Montgomery Baptist Hospital-Meadhaven Nursing Home and Central Alabama Rehabilitation Center in Montgomery.

He is a member of the American Hospital Association, the National Rehabilitation Association, and nominee of the American College of Hospital Administrators.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

Mrs. Apollonia Adams of Washington, D. C. said recently at the University of North Carolina, the clinic is no longer a mere adjunct of the hospital because of new developments in technology and medical care. It can provide good service with less expense.

As Mrs. Adams, an internationally known leader in many fields of nursing, conferred with several nurses from throughout the state, she said, "Clinic nurses all over the nation are asking what can be done to provide better care with existing facilities and personnel."

Clinics are carrying much of the patient care load held by physicians and hospitals in the past. Mrs. Adams added, "In the future the hospital will be only for the acutely ill."

Miss E. Shepley Nourse has joined the staff of the Division of Health Affairs at the University of North Carolina as assistant director of continuing education in charge of publication services.

In her new position, Miss Nourse will assist in the preparation of conferences and in the preparation of published materials in association with them. She will assist and consult with Health Sciences schools and faculty members on both scientific and non-scientific publications.

* * *

JoAnn McKay of the University of North Carolina School of Nursing was an instructor in a three week course for professional nurses conducted at Dorothea Dix Hospital Aug. 11-29.

* * *

The Third Annual Carolina Hospital Pharmacy Seminar was held on the University of North Carolina campus Sept. 6-7. The conference, one of the few seminars in the Southeast geared to practicing hospital pharmacists, is sponsored by the UNC School of Pharmacy and the N. C. Society of Hospital Pharmacists.

* * *

Why do students "turn on?"

Why do some who have tried drugs quit?

Is there any relationship between the drinking patterns of parents and drug use among students?

These are three of the questions considered by Dr. John Ewing, chairman of the University of North Carolina School of Medicine's Department of Psychiatry, in a paper presented to the Second International Congress of Social Psychiatry held in London Aug. 4-9.

In order to try to understand what motivates students to use drugs, Dr. Ewing designed a questionnaire to find what state of mind most appealed to both users and non-users. He also asked what degree of risk both groups were willing to take in order to achieve their desired mental state.

Those who used marijuana seemed to express greater drive for a change in feeling to some new state. They wanted to be more aware of sounds and music, were more interested in experiencing hallucinations, wanted to be more aware of their own thought processes, and sought a mystical or religious experience.

The users were much more willing to take the legal risks involved with marijuana. Yet a majority of the non-users stated that they would take a drug if there were no legal or health risks.

* * *

Dr. Mario Perez-Reyes, associate professor of psychiatry at the University of North Carolina School of Medicine, has received honors from a West German foundation and the National Institute of Mental Health.

The Anna-Monika Foundation has awarded Dr. Perez-Reyes \$1,250 for his research in the neurophysiological and neuroendocrinological aspects of mental depression. He will also administer a \$149,932 three year grant from the National Institute of Mental Health for research entitled "Sympathetic and Neuroendocrine Functions in Depression."

North Carolina has more than 50,000 emotionally disturbed children, according to State Board of Health statistics.

It is estimated some 10-15 per cent of the children in public schools are in some way handicapped to the extent their education is not maximized.

The education schools of the University here and of the University of Arizona, concerned over the high incidence in the states of disturbed and physically handicapped but educable-trainable children, are participating in a unique three-year project to integrate these children into normal classroom situations.

The project's first year is funded by a \$283,000 grant from the Bureau of Educational Personnel Development of the U. S. Office of Education.

The project's focus will be on the training programs and the institutional changes required to produce more competent children and more effective, understanding and skillful teachers.

* * *

A short course designed for Tar Heel professional nurses who work with ambulatory patients in clinics is being offered at the University of North Carolina.

The course, "Innovations in Clinic Nursing," is sponsored by the Continuing Education Division of the UNC School of Nursing. The first part of the three-part course was held Oct. 6-17; the second will be offered March 2-6, 1970, with an interim project between these two sessions.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY

The largest freshman class ever enrolled at the Bowman Gray School of Medicine began classes Sept. 15 in a new \$5.7 million building. These students will be the first beneficiaries of a vastly revised curriculum, which features a modernized approach to medical education.

Additional facilities, provided by the new construction, made it possible for the medical school to accept 76 first-year students, an increase of 15 over last year. The class was selected from 1,609 applicants.

The new curriculum, a result of five years of comprehensive study, is designed to prepare today's student for tomorrow's world, in which he will find major changes in the health care delivery system to meet the changing needs of society. The revision, while not meant to be revolutionary, is the most far-reaching since the institution became a four-year medical school in 1941.

It represents a departure from the traditional concept of medical education—two years of instruction in the basic medical sciences followed by a sharply separate phase of clinical training. Instead it places emphasis on subject matter, logical sequence, and relevancy to clinical training. It also emphasizes problem recognition and problem solving rather than attempting to expose the student to all of the growing mass of medical knowledge.

The major elements of the curriculum are:

—A new application of the basic medical sciences, featuring a core curriculum organized along departmental lines.

—A coordinated presentation of behavioral science material throughout the curriculum.

—Early student-patient contact, beginning with the first unit of study and increasing during the ensuing years of medical school.

—Increased elective time which will permit earlier selection of career specialties.

Instruction will be facilitated by recently-completed, multi-discipline teaching laboratories, housed in the new addition to the medical school. This building is one unit of the medical center's \$30-million expansion program.

Members of the first-year class represent 19 states and the District of Columbia. They hold degrees from 43 colleges and universities. Thirty-one of the 76 students are North Carolinians.

* * *

A neuropathologist and a biochemist recently were appointed to the faculty of the Bowman Gray School of Medicine. They are Dr. Howard M. Wisotzkey, assistant professor of pathology, and Dr. Jerry Sipe, instructor in biochemistry and director of the teaching laboratories.

Dr. Wisotzkey holds the B.A. degree from Dartmouth College and the M.D. degree from the University of Maryland School of Medicine. He completed an internship and four years of postdoctoral fellowship training in neurology and neuropathology at the University of Maryland. For the past two years he has been on the staff of the Armed Forces Institute of Pathology, Washington, D. C. During that time he also served on the faculty of the University of Maryland School of Medicine.

Dr. Sipe, who received the B.S. degree from Lenoir Rhyne College, recently completed requirements for the Ph.D. degree at the Bowman Gray School of Medicine. The degree was conferred by the Graduate School of Wake Forest University.

* * *

Dr. John Moossy, professor of pathology, has been named to the editorial board of a new journal, "Stroke —A Journal of Cerebral Circulation," which begins publication in January. The journal is published by the American Heart Association with the collaboration of the American Academy of Neurology and the American Neurological Association.

* * *

Dr. I. Meschan, professor and chairman of the Department of Radiology, has been elected to the International Registry of Who's Who.

* * *

Dr. James H. Harrill, professor of otolaryngology, recently was elected vice chairman of the Section on Otolaryngology of the American Medical Association.

* * *

Dr. Jesse H. Meredith, associate professor of sur-

gery, has been appointed chairman of the North Carolina State Medical Society's advisory committee to the North Carolina Department of Motor Vehicles.

* * *

Finley C. Watts, research instructor in radiology at the Bowman Gray School of Medicine, participated in the Second International Conference on Medical Physics Aug. 11-15 in Boston, Mass. He presented a paper on "Effects of Elective Filtration on Radiographic Quality and Resultant Reduction in Radiation Exposure Determined by TLD."

* * *

William L. Ramseur Jr. of Kings Mountain, a third-year student at Bowman Gray, served as one of five district coordinators for the Summer Appalachia Program, sponsored by the Student American Medical Association. His territory was western and northwestern North Carolina and southwestern Virginia. Edward G. Laclergue, a third-year student from San Jose, Calif., worked in the SAMA program at Calhoun, Ga.

The students observed the health-related agencies which are involved in the delivery of health care. They made rounds with doctors, traveled with public health nurses, nutritionists and sanitarians, and helped conduct seminars for lay people.

* * *

Robert L. Shuman of Clarendon Hills, Ill., president of the student government at the Bowman Gray School of Medicine, conducted a survey of students at the school this summer on the proposed change in the draft of medical doctors.

Dr. Roger O. Egeberg, assistant secretary for health in the Department of Health, Education and Welfare, has proposed that some new physicians would serve one year of their military duty in sections of the United States where doctors are urgently needed.

Of the 29 Bowman Gray students who responded to the questionnaire, 19 indicated a preference for non-military service, six chose the military, two said they are previously obligated to the military, and two had no definite preference.

* * *

Dr. David L. Kelly Jr., assistant professor of neurosurgery, was a member of the Clinical Trials Committee of the National Cancer Institute which recently discussed new developments in the chemotherapy of cancer at a meeting in Bethesda, Md.

* * *

Dr. Clark E. Vincent, professor of sociology and director of the Behavioral Sciences Center, spoke on "How to Talk to Patients about Sexual Problems" at a recent meeting of the Ohio Academy of General Practice in Columbus, Ohio.

NEW MEMBERS OF THE STATE SOCIETY

Joseph Craig Frye, M.D., R, 3911 Larkston Drive, Charlotte, N. C. 28211

Henry Stuckey, M.D., I, 1515 Elizabeth Ave., Charlotte, N. C. 28207

- Lenoidas Rosser Littleton, R, 440 Oakhurst Rd., Statesville, N. C. 28677
- Lloyd Clarence Brannon, P, 4208 Redington Drive, Raleigh, N. C. 27609
- Robert W. Carter, M.D., I, 1704 Woodland Avenue, Burlington, N. C. 27215
- Robert G. Crummie, M.D., D, 2941 New Bern Ave., Raleigh, N. C. 27610
- Ernest Adam Leipold, M.D., I, Professional Village, Van Buren Rd., Eden, N. C. 27238
- Warner Leander Hall, Jr., M.D., ObG, 3622 Haworth St., Raleigh, N. C. 27609
- Robert Lewis Tuttle, M.D., Box 203, Route 8, Lexington, N. C. 27292
- William H. White, Jr., M.D., ObG, 411 Carthage St., Sanford, N. C. 27330
- Charles R. Marlin, M.D., GP, 1737 Robinson Dr., Jacksonville 28540
- John H. Hall, M.D., D, Naval Hospital, Chelsea, Mass. 02150
- Symm H. McCord, M.D., GP, Professional Building, Sylva, N. C. 28779
- Irving King Bass, M.D., GP, 909 Hilltop Boulevard, Reidsville, N. C. 27320
- Charles R. Lockert, M.D., OR, 1420 Arbor Drive, Salisbury, N. C. 28144
- Jack Campbell, M.D., OALR, 508 Murchison Bldg., Wilmington, N. C. 28401
- Raul Ignacio Lopaz, M.D., N. P. O. Box 2962, Duke Med. Center, Durham, N. C. 27706
- Wayne Carson Keontz, M.D., Pd, 1418 E. Colonial Dr., Salisbury, N. C. 28144
- Frederick Gerhard Franz Wiegand, M.D., ObG, 517 Compton Dr., Raleigh, N. C. 27609

SYMPOSIUM ON RADIOLOGY AND GENERAL MEDICINE

A symposium on "Radiology and General Medicine" will be presented by the Department of Radiology, Memorial Hospital, Danville, Va., in cooperation with the Department of Radiology, Duke University Medical Center, Durham, Nov. 13-15. Sessions will be held in the Nurses Auditorium, Memorial Hospital, Danville.

Address all inquiries to Robert McLelland, M.D., Director, Department of Radiology, Memorial Hospital, Danville, Va. 24541.

NORTH CAROLINA BLUE CROSS AND BLUE SHIELD, INC.

North Carolina Blue Cross and Blue Shield, Inc., paid more than one million claims, totaling \$150 million in 1968.

In its first Annual Report, published this week, the Corporation says payments increased \$30 million over the combined payments of Hospital Saving Association of Chapel Hill and Hospital Care Association of Durham, which were consolidated in January 1968 to form the new corporation.

The report shows:

—Over 700,000 regular Blue Cross and Blue Shield claims, totaling \$62,050,298, were paid to hospitals and physicians on behalf of subscribers.

—251,011 Medicare claims, totaling \$59,838,362, were paid to hospitals, extended care facilities, and home health agencies.

91,500 Medical Assistance claims, amounting to \$17 million were processed for the North Carolina Department of Public Welfare and other State agencies; and preparations were completed for administering the State's Physicians' Payment Program, effective January 1, 1969.

—Approximately 87,000 claims for national accounts, major medical, and extended benefits, military dependents and other special accounts, totaling \$11,038,579 were paid.

Sales emphasis was placed on upgrading coverage, service, and new sales: 128,010 new applications were written, resulting in a net increase of 54,820 participants for the year. Approximately 130,000 certificates were upgraded to higher benefits.

John Alexander McMahon, Blue Cross and Blue Shield president, described 1968 as a year of challenge and change. "It was a difficult, demanding year for Blue Cross and Blue Shield," he said, "a year that required an inordinate amount of staff time as we moved with all possible dispatch to meet our commitment to the beginning of a new day of improved health service for the people of North Carolina."

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NATIONAL INSTITUTES OF HEALTH

The cooperation of physicians is requested in the referral of patients for a study of the efficacy of myocardial revascularization for the treatment of coronary artery disease being conducted by the National Heart Institute at the Clinical Center, National Institutes of Health in Bethesda, Maryland.

Any patient below 60 years of age, with severe angina pectoris, will be considered. Each patient will have a complete diagnostic evaluation, including cardiac catheterization and coronary angiographic studies. If indicated, operative intervention will then be offered.

Physicians interested in having their patients considered for this project address Stephen Epstein, M.D., Clinical Center, Room 7B-15, National Institutes of Health, Bethesda, Maryland 20014.

Mental Health Programs Viewed In Action

"MENTAL HEALTH AND THE COMMUNITY: Problems, Programs, and Strategies," is a book that bridges the gap between theory and program implementation in community mental health. Each chapter is an original contribution by a person actively involved in the struggle of translating ideas into action. The reader is given a picture of the way in which programs are implemented in various areas of the country by participants in different disciplines.

Between the opening chapter describing efforts to break the destructive cycle of poverty in Topeka to the closing utopian description of planning the new city of Columbia outside the nation's capital, "MENTAL HEALTH AND THE COMMUNITY" illustrates the state of the art in the field of community mental health. The book is divided into four sections dealing with programs that have a social action orientation, a mental health service orientation, a problem-solving orientation, and with those that open new areas of use for the mental health professional.

Among the contributors are: Dwight W. Rieman, H. G. Whittington, Quentin Rae-Grant, Frank Kiesler, Harris B. Peck, Joseph L. Massimo, Bryce W. MacLennan, and Paul V. Lemkau.

The Month In Washington

A food and Drug Administration advisory committee found oral contraceptives to be "safe," but reported that British and U. S. studies had established "an etiologic relation between thromboembolic disorders" and their use.

The Advisory Committee on Obstetrics and Gynecology, making its second report on oral contraceptives, said that their benefits outweighed the risks sufficiently to designate them "safe" within the intent of the federal law.

The committee, in its initial report three years ago, approved of oral contraceptives with reservations. It now said that these reservations appear to have been justified because of the adverse reactions reported in both scientific literature and the general press. But the report concluded:

"When these potential hazards and the value of the drugs are balanced, the committee finds the ratio of benefit to risk sufficiently high to justify the designation safe within the intent of the legislation (Kefauver-Harris Amendments of 1962)."

The report said scientific studies "suggest that the mortality from thromboembolic disorders attributable to the oral contraceptives is about 3 per 100,000 women per year, adding less than 3% to the total age-specific mortality in users of these drugs." In a U. S. study, the risk of thromboembolism to a woman using hormonal contraceptives was estimated by indirect methods to be 4.4 times that of a non-user.

The report said there is no evidence that any metabolic alterations induced by the oral contraceptives pose serious health hazards.

The effectiveness of oral contraceptives was found to be significantly higher than for intrauterine devices or traditional methods.

* * *

Abandoning a long court fight, the Internal Revenue Service reversed itself and ruled that organizations of physicians authorized under state professional association laws will be treated as corporations for tax purposes.

The IRS announced that it would not appeal to the Supreme Court two recent decisions by U. S. courts of appeal favoring the professional association. In accordance with these court decisions, the IRS said, "organizations of doctors, lawyers, and other professional people organized under state professional association acts will, generally, be treated as corporations for tax purposes."

Forty-two states have such laws which offer tax benefits, including deferment of the tax on pension plan contributions until retirement.

The federal government has started a program designed to increase enrollment in the nation's schools of medicine and osteopathy by 4,000 over the next four years.

Known as the Physician Augmentation Program, the activity, under the Department of Health, Education and Welfare, supports the addition of 1,000 first year places commencing with the fall term of 1970. These places are in addition to any increase to which the schools have already committed themselves. Total enrollment through this program is expected to be about 4,000 in the fourth year of operation. The Physician Augmentation Program is authorized under the Health Manpower Act of 1968.

* * *

President Nixon created the cabinet-level Environmental Quality Council to begin a major attack on pollution of the environment. He also named a companion 15-member Citizens' Advisory Committee on the recommendations of Lee A. Dubridge, Ph.D., his chief science adviser.

The President said the council, serving as an advisory board on a par with the National Security Council and the Urban Affairs Council, "will provide the focal point for this Administration's efforts to protect all of our natural resources."

Dubridge said "the problem is how we can make maximum use of our environment . . . without despoiling it." He said the council would move promptly on the problems of disposal of waste products—a key factor in deterioration of the environment.

The President will head the council, which also will include the Vice-President and the Secretaries of Agriculture, Commerce, Health, Education and Welfare, Housing and Urban Development; Interior, and Transportation.

Laurence S. Rockefeller, one of the nation's leading conservationists and a key figure in Lady Bird Johnson's National Beautification Campaign, will be chairman of the Citizens' Advisory Committee.

* * *

Drug combinations became the target of the Senate Small Business Subcommittee's

investigation of the prescription drug industry.

Medical school professors critical of drug combinations were called as witnesses in two days of hearings opening this phase of the drug industry probe which began nearly two years ago. It was not indicated when, or even whether, drug company representatives would have an opportunity to defend their combination products before the subcommittee.

* * *

Dr. Heinz F. Eichenwald, a National Academy of Science drug specialist, told the subcommittee that "misleading advertising" had lured "the gullible physician" into prescribing useless and sometimes dangerous drug combinations. He also said continued use of drug combinations "amounts to a strong indictment of the ability of many physicians to judge what is effective and what isn't."

Dr. Eichenwald, pediatrics chairman at the University of Texas Southwestern medical school in Dallas, and Dr. William M. M. Kirby, a medical professor at the University of Washington medical school in Seattle, testified on the opening day of hearings on combination drugs conducted by the subcommittee which is headed by Sen. Gaylord Nelson (D., Wis.).

The two physicians were among 30 drug experts who evaluated combination drugs for the National Academy of Science. The experts' unanimous report said the combinations were useless and sometimes dangerous.

The American Medical Association urged that Congress approve full appropriations for medical education programs.

Dr. C. H. William Ruhe, director of the AMA's Division of Medical Education, testified before a House appropriations subcommittee that the nation's urgent need for more physicians could "only be met effectively by a major increase in the capacity of American medical schools to educate more physicians."

"It is therefore appropriate to emphasize again that full funding in the amounts authorized by the Health Manpower Act of

1968 is necessary to permit the construction of new and expanded facilities before major enrollment increases will be feasible," Dr. Ruhe said.

In a letter to the House Public Health and Welfare Sub-committee, the AMA also supported extension of the Medical Library Assistance Act. Dr. Ernest B. Howard, AMA executive vice-president, said that "we cannot exaggerate the importance to the health professions and the public they serve" of the many beneficial services supported through the programs.

* * *

The House passed and sent to the Senate a three-year \$937 million extension of the Hill-Burton Act under which the federal government has helped finance construction of hospitals and nursing homes with 425,000 beds.

In addition to extending existing aid, the bill provides new loan guarantees, as requested by the Nixon Administration, and interest subsidies, which the Administration opposed.

The bill as passed authorizes appropriations (over three years) up to \$405 million for hospital construction; \$165 million for modernization; and \$300 million in guaranteed loans, toward which the government would contribute up to \$37 million in three per cent interest subsidies. In addition, grants up to \$30 million could be made for emergency room modernization.

In Memoriam

Mark T. Frizelle, M.D.

WHEREAS, Dr. Mark T. Frizzell since graduation from the Medical College of Virginia in 1906 has practiced medicine in Ayden and Pitt County from July 1, 1907, to May 31, 1969, and

WHEREAS, he has been a member of the Pitt County Medical and Dental Society and the Medical Society of the state of North Carolina, serving as president of the Pitt County Medical and Dental Society, president of the Second District Medical Society, and a member of the North Carolina State Board of Health, and

WHEREAS, he has faithfully served the citizens of Ayden and Pitt County as the first president

of the Pitt County Farm Bureau, as a member of his local Draft Board in World War II, and as a member of other civic groups, and

WHEREAS, he has served his religion by being a member of the Methodist Church since 1896, and,

WHEREAS, he has served philanthropy by generous contributions to the Dr. and Mrs. Mark Frizzell Bail Park in Ayden, and to his alma mater, Duke University, and to Louisburg College, Fayetteville Methodist College, Boy's Home at Lake Waccamaw the Girl's Reformatory and the Methodist Children's Home, Raleigh, North Carolina, Therefore be it

Resolved that the Pitt County Medical and Dental Society go on record as expressing its sincere and deep appreciation to Dr. Mark T. Frizzell for a job well done to medicine, to his community, to his church, and to philanthropy through the many and faithful years that he has laboured, and be it further

Resolved that the Pitt County Medical and Dental Society present this resolution of appreciation to Dr. Mark T. Frizzell on June 12, 1969, and be it further

Resolved that a copy of this resolution be inserted into the minutes of the Pitt County Medical and Dental Society and that the press of the area and the North Carolina Medical Journal receive copies of this resolution so that all people of his acquaintance may know the high regard and warm affection the members of the Pitt County Medical and Dental Society hold for Dr. Mark T. Frizzell.

Pitt County Medical and Dental Society

* * *

Clarence Whitfield Bailey, M.D.

Dr. Clarence Whitfield Bailey died January 30, 1969 at the age of 68. Born in Roper, North Carolina, he received his B.A. degree from Wake Forest College in 1923, and his M.D. from the Jefferson Medical College in Philadelphia in 1925. He served his internship in Philadelphia General Hospital. He specialized in the field of Medicine at the Municipal Hospital in Philadelphia. He came to North Carolina and worked with the Reeves Clinic in Greensboro for one year, then in 1930 came to Rocky Mount as an Eye, Ear, Nose and Throat Specialist. He was a member of the American College of Surgeons.

He was a gifted surgeon, devoted to his work, loyal to his friends and outstanding was his granite-like integrity.

It is hereby resolved that we, the members of the Edgecombe-Nash Medical Society express to Mrs. Bailey and his family our respect for the memory and the deeds of Dr. Clarence Whitfield Bailey. It was a privilege to have him in our Society. It is further resolved that a copy of these resolutions be sent to his wife and to the Archives of the Medical Society of North Carolina; and the original be entered in the records of the Edgecombe-Nash Medical Society.

BE-INvolved Campaign Launched

John D. Rockefeller IV, West Virginia's Secretary of State, and Margaret B. Dolan, president of the National Health Council inspected student health projects in Appalachia in August.

Mrs. Dolan is a University of North Carolina professor and head of the Department of Public Health Nursing there.

The two distinguished citizens are serving as co-chairmen of an honorary committee named by the American Nurses' Association. The visits officially launch the "BE-INvolved" campaign of the ANA, the professional association of registered nurses.

Objectives of the campaign are: to stimulate more nurses to be involved in their communities, to demonstrate the American Nurses' Association's commitment to meaningful activities designed to improve our society, to find nurses throughout the country whose activities exemplify this ideal, and to encourage more nurses to be involved in their professional association.

SILICONE RUBBER IMPLANT REPLACES ARTHRITIC OR DESTROYED HAND JOINTS

A medical grade silicone elastomer implant has been used successfully to restore the function of hands disabled by rheumatoid arthritis or trauma.

Dr. Alfred B. Swanson, working for the last four years in conjunction with the medical products division of Dow Corning Corporation, developed the flexible, one-piece, intramedullary-stemmed prosthesis, as well as a surgical technique for its implantation. Dow Corning is manufacturing the implant.

In the past four years, Dr. Swanson has implanted Silastic finger joints in 45 patients afflicted with rheumatoid arthritis or other types of destructive hand disorder. Results to date in all cases indicate greatly improved joint function and cosmetic appearance with good stability and tissue acceptance.

The use of the Silastic finger joint implant is being limited to field clinic testing and evaluation in surgical clinics throughout the United States and the world.

Winthrop Laboratories Names Associate Medical Director

Dr. Joseph H. Magee has joined Winthrop Laboratories as an associate medical director, it was announced by Dr. M. E. Trout, vice-president and medical director.

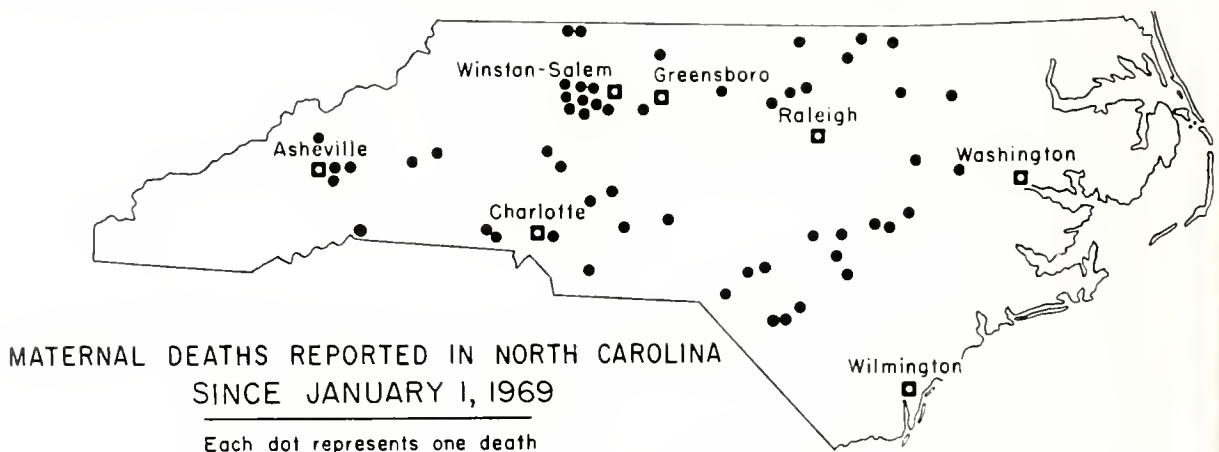
Before joining the company Dr. Magee was assistant professor of medicine at the Medical College of Virginia and Jefferson Medical College in Philadelphia. He will continue as a research collaborator at Brookhaven National Laboratory.

He is a diplomate of the American Board of Internal Medicine, a Fellow of the Philadelphia College of Physicians, and a member of the American Association of University Professors and American Psychological Society.

The itch is now by cleanliness banished from every genteel family in Britain. It still prevails among the poorer sort of peasants in Scotland, and among the manufacturers in England. These are not only sufficient to keep the seeds of the disease alive, but to spread the infection among others. It were to be wished, that some effectual method could be devised for extirpating it altogether. Several country clergymen have told me, that be getting such as were infected cured, and strongly recommending an attention to cleanliness, they have banished the itch entirely out of their parishes. Why might not others do the same?—William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Philadelphia, Richard Folwell, 1799, p. 285.

Classified Advertisements

OFFICE SPACE—NORTH HILLS PROFESSIONAL PARK, RALEIGH, N. C.—To be ready for occupancy in late October. Individually designed suites to meet your requirements. Heating and air conditioning controls for each suite. Complete services furnished. Interested physicians may write or call T. W. Smith, P. O. Box 17361, Raleigh, N. C. 27609. Telephone (9-9) 787-5559 for complete details.





MEDICAL JOURNAL

PUBLISHED MONTHLY BY THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

IN THIS ISSUE:

Post-Infarction Ventricular Septal Defect

HARRY K. DAUGHERTY, M.D., FRANCIS ROBICSEK, M.D., AND
DONALD C. MULLEN, M.D.

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Post-Infarction Ventricular Septal Defect A Major Surgical Emergency

HARRY K. DAUGHERTY, M.D., FRANCIS ROBICSEK, M.D., AND
DONALD C. MULLEN, M.D.

Rupture of the ventricular septum is one of the well known and certainly not infrequent complications of myocardial infarction.¹ Even today, when diagnostic measures are sophisticated and surgical techniques advanced, survival of patients with rupture of the septum is still low—primarily due to the advanced stage of the underlying disease and to technical difficulties in the surgical repair itself.

In recent years we had the opportunity to perform four operations on three such patients with postinfarction ventricular septal defects. All patients survived the procedure and their clinical condition improved significantly.

Case Reports

Case 1

A 48-year old man who had had hypertensive disease for ten years was admitted to the Department of Internal Medicine of Memorial Hospital with a sudden onset of pain in both arms and shortness of breath. On the basis of clinical and electrocardiographic findings, the diagnosis of acute myocardial infarction was made. The patient received oxygen, pain-relieving medication, and Coumadin. His general condition remained satisfactory until the sixth day of his hospital stay when his condition took a turn for the worse. A grade IV harsh systolic murmur, previously absent, was observed at that time.

Cardiac catheterization was performed and the oxygen content of the blood samples gave unmistakable evidence of a significant degree of left-to-right shunt at the ventricular level. Six weeks following the onset

of his first symptoms, the patient was operated on. At the time of surgery a fresh necrotic aneurysm was found occupying the apical and left anterolateral portion of the left ventricle. With the use of temporary cardiopulmonary bypass, the aneurysm was excised, and through the area of the resected aneurysm a ventricular septal defect measuring approximately 2 x 2 cm was exposed and closed with interrupted sutures.

The patient tolerated the operation well, showing significant improvement during the postoperative period and making an uneventful recovery. Now, five years later, he is working full time and is virtually asymptomatic.

Case 2

The patient was a 52-year-old woman in whom a grade IV harsh systolic murmur and a well palpable thrill developed four days following an acute myocardial infarction. Again the clinical diagnosis of a perforated ventricular septum was confirmed by the analysis of blood samples obtained by cardiac catheterization.

The repair of the ventricular septal defect was undertaken, utilizing total cardiopulmonary bypass. At the time of the operation the perforation of the interventricular septum was approached through the right ventricle. It measured approximately 1.5 x 2 cm. Adjacent to this hole, a second smaller area of perforation was found. Closure was accomplished with the use of interrupted sutures of Mercileue tied over with pledgets of Teflon.

The patient went through the operation well and no murmur or thrill was heard during the immediate postoperative period. Five hours after surgery, however, a harsh systolic murmur recurred. The patient's condition gradually deteriorated during the upcoming hours. Because of the gradual worsening of her condition, she was returned to the operating room, and with the use of total cardiopulmonary bypass, the right ventricle was reopened. It was found that the necrotic myocardium was not holding the occluding sutures. Closure of the defect was accomplished with interrupted mattress sutures, led through the ventricu-

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Fig. 1. (Case 2) Angiogram. Dye injected into the left ventricle shows communication between the left and right ventricular chambers.

lar septum from the inside and tied on the anterior surface of the heart over strips of Teflon felt.

The patient tolerated the second procedure as well as the first and made a somewhat slow but most satisfactory recovery. At the time of her discharge she had only a low-grade systolic murmur, and now, nine months following the operation, she is in a satisfactory clinical condition.

Case 3

A 55-year old executive was admitted to the hospital six weeks following an extensive myocardial infarction. There was a harsh systolic murmur audible over the entire precordium, and he had several episodes of pulmonary edema. The suspected diagnosis of postinfarction ventricular septal defect was confirmed by oxygen studies of blood samples obtained from the right side of the heart as well as by cinecardiography. The cine studies also demonstrated complete occlusion of the anterior descending branch of the left coronary artery.

Utilizing temporary cardiopulmonary bypass, the perforation on the ventricular septum was explored through a right ventriculotomy incision. A defect was closed with a previously prepared Dacron prosthesis placed to the left ventricular side of the perforation. The lower line of sutures were tied on the right ventricular side of the perforation. The upper row was led through the anterior wall into the interventricular sulcus and tied over Teflon felt strips for further reinforcement.



Fig. 2. (Case 3) Aortic root injection demonstrates complete occlusion of the anterior descending branch of the left coronary artery (arrow).

The patient's postoperative course was uneventful and all previous signs of heart failure disappeared. Now, five months after surgery, he is doing very well, experiencing only moderate dyspnea on significant exertion.

Discussion

There have been reported a total of 40 cases of attempted closure of postinfarction ventricular septal defects with a survival rate of 60% at the end of two months. This compares favorably with a survival rate 19% in the untreated cases (in 1 to 25). The low survival rate in the untreated cases shows that rupture of the ventricular septum following myocardial infarction is one of the most serious complications which require timely and energetic treatment.

The earlier reports^{5,12,19} emphasize that surgical repair should be delayed for two to three months to allow the necrotic tissue around the edges of the defect to become fibrous and be able to hold sutures satisfactorily. With the increased experience, it has become obvious that repair can be successfully accomplished at an earlier time.^{4,11,16-18,25} The importance of this observation is more evident if we consider that the mortality in the untreated cases is 24% on the first day after rupture and 65% within the first two weeks.²⁶

The major problem of surgical technique is the friability of the infarcted ventricular septum. Different methods have been devised to make the sutures hold safely. Shum-

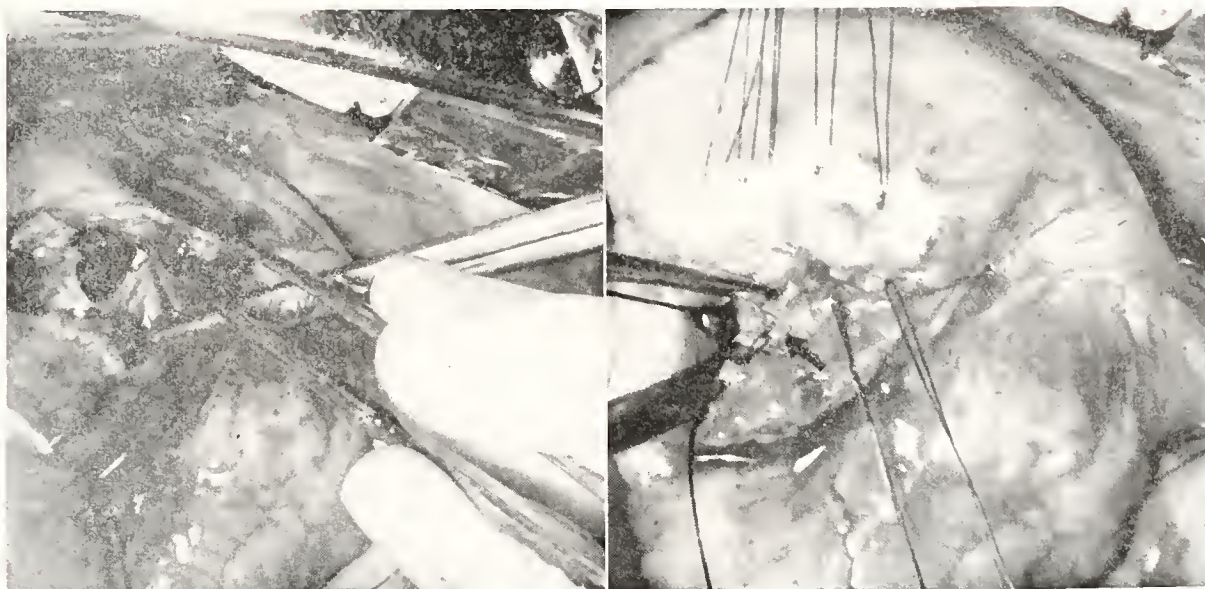


Fig. 3. (Case 3) Operative situs. A. The exposed perforation of the ventricular septum. B. The defect closed with a synthetic patch (arrow).

way and his associates,²⁴ in a recent report, described a technique in which portions of the sutures were brought out anteriorly through the ventricular wall and tied over with buttresses. This method was used in one out of three patients. In our third patient we were obliged to use a patch because of the large tissue defect which made it unlikely that the direct sutures, even if tied over buttresses, would hold satisfactorily.

In our relatively limited experience, we also concluded that coronary cineangiography (if the patient's condition permits) provides important information, because it allows the operating surgeon to disregard the integrity of some branches of the coronary artery already occluded before the operation.

Summary

Perforation of the ventricular septum following myocardial infarction is an ominous development with a high mortality rate. Our experiences in the surgical management of three patients with the disease is presented. All three underwent successful surgical repair. It is our opinion that the operation should be done early, that the occluding sutures should be reinforced with appropriate synthetic material, and that coronary cineangiography before the operation supplies

important information useful during surgery.

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Clinical Thermometry: An Important Diagnostic Aid In Cardiogenic Shock

BAXTER G. NOBLE, M.D.

Diagnosis of acute coronary occlusion with its associated cardiogenic shock is often difficult or impossible, especially during the crucial early hours of the disease. This is because, by present techniques, pathological and chemical alterations sufficient for clinical or laboratory identification accumulate slowly—or even worse, never accumulate at all.

Clinically, the patient sustaining an acute myocardial infarction may on initial examination show few or no outward signs of his serious circulatory impairment. His appearance may be normal, and his skin may lack the classic ashen pallor and clamminess of shock; or the physician may happen to see him initially after he has recovered from these obvious signs, or even before they have set in. The radial pulse will frequently be normal in character and rate, often re-

maining so for hours before accelerating significantly. The blood pressure in the upper arm will likely be adequate or even elevated; auscultation of the chest will probably reveal nothing out of the ordinary.

The symptoms themselves may vary from none at all to excruciating pain, either localized or referred to almost any conceivable point in the body above the belt line, and suggesting any of a number of extracardiac diagnostic possibilities ranging from hiatus hernia to bursitis. Laboratory studies in the early stages of myocardial infarction are usually less than helpful. The SGOT value, when it does attain unequivocal elevation, may require two or three days to do so. The sedimentation rate and white blood cell count are too nonspecific to be useful, and the electrocardiogram, in our experience, almost always remains within normal or equivocal limits during the first few hours. Although there may actually be early nonspecific T or

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ST alterations, they are usually so slight or of such nature as to be nondiagnostic.¹ Oliguria or anuria, probably the most sensitive and dependable clinical indicator of shock, is often misdiagnosed as urinary retention or underhydration associated with the administration of analgesics and the accompanying reduction of intake of fluid; and unless an indwelling catheter is inserted at the outset, it is difficult to be sure about the urinary output before several hours have elapsed. The purpose of this paper is to document our experience with clinical thermometry as an aid in diagnosing and monitoring cardiogenic shock.

Materials and Methods

Located at the hospital bedside is a simple instrument that can provide invaluable diagnostic and prognostic aid in cardiogenic shock. This instrument is the common fever thermometer, and for our purposes here it is used primarily as an indicator of subnormal temperatures. Conventionally this facet of clinical thermometry has so long been generally ignored that readings below the proverbial 98.6 degrees are usually disregarded, or at best charted inaccurately.

Principles and physiology

The thermometer's application as described in this paper is based on the following patho-physiological principles. So sensitive is the vascular system to heart-pump impairments, that even minimal myocardial injury will initiate progressive exclusion of non-vital circulation in order to sustain the myocardium and brain until reserve pumping patho-physiological principles: So sensitization and shunt mechanisms, the extent of this process depends somewhat on the magnitude of the cardiac-crippling mechanism, and it may vary all the way from the transient subclinical ischemia of a small epicardial injury to the obvious massive shock of a large transmural infarct or ruptured ventricle. This circulation-excluding process begins peripherally and progresses centrally, compromising almost from the outset skin, renal and splanchnic blood flow.² Early involving the distal extremities, it next pro-

ceeds to their proximal aspects and to the extracranial circulation (face, mouth, tongue, salivary glands); then finally, as shock deepens, it reaches the more vital central vascular beds.

In order to minimize tissue damage from ischemia, the involved areas simultaneously undergo rapid, self-induced hypothermia through an active and complex physiological heat-transfer process aided by diaphoresis. Hence the skin's "cold, clammy" feel to the touch, even though, paradoxically, the victim himself rarely experiences chilliness and on the contrary may even complain of being hot.

Technique

The "touch test," however, though an important part of the clinical examination, is subjective and lacks sufficient sensitivity to be reproducible and dependable. The fever thermometer on the other hand, does have the precision needed, and can be used as an extremely sensitive, indirect indicator of the intensity and duration of clinical or occult shock. So simple is the procedure that it may easily be added to the nursing routine of intensive and coronary care units. The technique consists merely in frequently charting axillary temperatures in conjunction, if possible, with simultaneous oral ones, and looking for subnormal values or precipitous drops.

On a total of 26 hospitalized patients in cardiogenic shock, we charted axillary and oral temperatures and correlated them with the depth of clinical or subclinical shock. There were 22 cases of acute myocardial infarction, 2 of mitral disease with acute left-sided failure, and 2 of hypertension and severe congestive failure.

Our routine was as follows: We initially had the attendants record the axillary temperature hourly, and (if possible) every second hour the oral temperature of patients suspected of having a myocardial infarction or other shock-inducing cardiac impairment. If, after six hours, readings remained essentially normal, we reduced their frequency by half so as to minimize any disturbance to the patient. We usually maintained this schedule for another 36 hours,

and for the next three or four days we secured readings every four hours. Then, as long as convalescence continued uncomplicated, we took an axillary reading simultaneously with the routine oral temperature. If the temperature fell significantly, we reverted immediately to the initial schedule and maintained it until readings had again risen to normal. Realizing that nasal oxygen may affect oral temperature values, we shut off the oxygen before and during the procedure, providing (as was usually the case) this could be safely done. Actually, however, we seldom encountered sufficient cooling from this source to induce sublingual hypothermia that might be confused with that of shock.

Because of the importance of correct temperature readings in monitoring hypothermia, attendants were carefully instructed to shake the thermometer down as far as the mercury column would go below the 94 mark, and to leave the instrument high in the axilla, with the upper arm adducted against the chest wall, for at least five minutes, taking care that no clothing intervened.

For supplementary monitoring of the temperature of the skin, we adapted a commercial indoor-outdoor weather thermometer of the type available at hardware stores for about five dollars. This instrument is so constructed that its "outside" scale connects to a five-foot length of small shielded flexible tubing that terminates in a miniature metallic cylinder for remote temperature sensing. We secured the thermometer itself to the bed frame or intravenous stand in general view, and we taped the sensing bulb into the patient's axilla. This gave us a constant indication of trends in local skin temperature and alerted us immediately to gross changes which might otherwise be missed or only detected later by our routine technique.

Because of its unexpanded scale, this weather thermometer, of course, lacked the readability and precision of the clinical thermometer or thermocouple, and tended to register about 2 degrees low, owing to cable heat loss; nevertheless, we found that

it was useful and eliminated disturbing the patient for frequent determinations. (Similarly, when attached to the patient's arm or forearm, this type of instrument was useful in detecting temperature declines of even milder degrees of shock, but more overlapping with normal values resulted, because of the greater physiological variation of distal extremity temperatures.)

Our criteria for the diagnosis of acute myocardial infarction in clinically suspected cases were based primarily on serial electrocardiographic alterations as set forth in standard texts of cardiology. ST monophasic alterations, pathological Q waves (when present), and appropriate serial T wave changes were considered of primary importance. SGOT elevations were taken into account only when associated with significant EKG abnormalities. As supplementary evidence, considerable weight was accorded to the development of pulmonary edema, with or without cardiomegaly, as determined by serial chest roentgenograms.

Our criteria for ascertaining the presence of cardiogenic shock were chiefly two: a subnormal urinary output of less than 0.4 cc/minute, and (when present) systolic hypotension of less than 80 mm Hg. Diminished renal filtration was determined by carefully monitoring urinary volume, a procedure greatly facilitated by the use of indwelling catheters in 23 of the patients. Sphygmomanometer determinations were less often helpful, since unequivocal declines in blood pressure usually occurred relatively late, or only in deeper shock already clinically obvious.

Results

Since body temperatures in health may vary considerably with different individuals and with different hours, days and seasons, we recognized the inevitability of some overlapping between normal and abnormal values. Nevertheless, we arrived at the following arbitrary values in grading cardiogenic shock:

1. Axillary temperature of less than 95 F and oral temperature of less than 96 F—severe to moderate shock (Fig. 1). This cri-

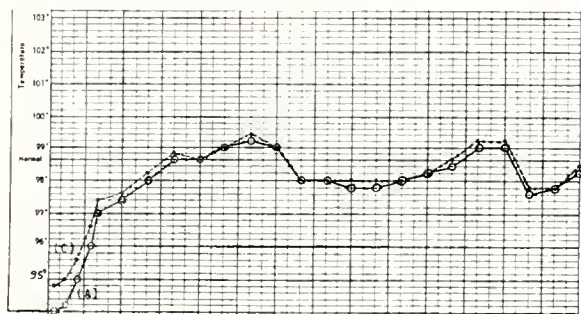


Fig. 1. Temperature chart of a 56-year-old man with an acute transmural infarction that began about two hours before admission. The graph covers the first 42 hospital hours and demonstrates the initially subnormal axillary (A) and oral (O) temperatures which rapidly rose as shock diminished.

terion applied to 16 of our 26 cases, and was accompanied by complete renal shut-down, although the blood pressure was initially normal or above in the 10 cases that we classified as moderate. All of the 16 patients exhibited coldness and clamminess for at least a brief period during their illness, and all eventually had some degree of radiologically demonstrable pulmonary edema. Fourteen of the 16 had acute myocardial infarcts (9 posterior and 5 anterior), one had acute congestive failure complicating hypertension, and one had left-sided failure from mitral disease.

2. Axillary temperature of 95 to 96.6 F

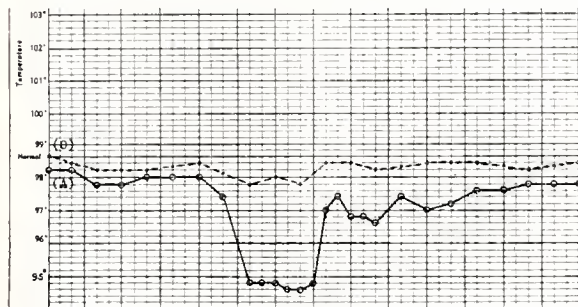


Fig. 2. Temperature chart of a 49-year-old man during a subclinical extension of his week-old lateral infarct. The chart covers a 96-hour period beginning on the sixth day, and shows a precipitous drop in axillary temperature (A) on the seventh day, while oral temperature (O) remained relatively unaffected. Although pulse, respiration, and general appearance were essentially normal throughout, serial electrocardiograms indicated that an anterior extension of the infarction had occurred at about the time of the temperature decline. Moreover, mild pulmonary edema was apparent by x-ray during the period of hypothermia...

with oral temperature above 96 F: moderate to mild shock. This category comprised 10 patients from our series, and all were oliguric, with brief anuria in 4. Three had borderline hypotension—80-86 systolic. Except for 2 who initially had mild sweating, shock was not detectable by physical examination in this group, yet all did have electrocardiographic findings indicative of mild to moderate damage.

3. Precipitous drop by two or more degrees of an axillary temperature that had been previously normal: impending shock or extension or recurrence of cardiac injury (Fig. 2). A similar decline of an already subnormal temperature usually presaged further vascular deterioration. Eight patients of our series demonstrated these patterns, with 2 subsequently showing electrocardiographic evidence of an anterior infarct superimposed on a posterior one, 5 sustaining a lateral extension of an anterior occlusion, and 1 suffering a massive pulmonary embolus. In half of these patients, deterioration was not evident by clinical observation until six hours after the temperature decline.

Use in the Office or Home

The usefulness of clinical thermometry in cardiology is not limited to the hospital alone. It can have equally significant application at the physician's office or in the patient's home, especially as a means of confirming the diagnosis of a suspected coronary occlusion, or for affirming the likely existence of abnormality even though all other findings may be negative. The following case is an example:

Case Report

The patient, a 61-year-old white male, first appeared in the office on the morning of February 4 with the chief complaint of numbness at both elbows. He stated that this numbness had started during the previous hour while he was driving to work, that it was mild, and that it had lasted only about five minutes. It had now completely subsided and, according to his account, had not actually been very uncomfortable at any time. The fact that his younger brother recently died of a sudden heart attack prompted him to seek medical advice when the above symptoms appeared.

This patient had otherwise been in excellent health, and the review of systems was negative. On physical examination he appeared healthy. His blood pressure was 120/70, his respirations 18 per minute, and the remainder of the physical examination, including heart, lungs, abdomen and extremities, was negative. The skin, furthermore, appeared normally pink and was neither cold nor damp to the touch. The hemoglobin was 14 Gm, and the urinalysis, chest films, and venous pressure were all normal. The electrocardiographic tracing appeared physiological, although the QT interval (0.42 sec) was more prolonged than the expected mean for the heart rate.

The temperature, however, was not normal, the axillary being 96.2 F and the oral 96.6 F. On the confirmatory basis of this abnormality, he was told that he might well be undergoing the "sentinel" stage of an acute myocardial infarction and that he could suffer a full-blown attack within the week. Accordingly, strict bed rest under close medical observation was urged, but was refused by the patient because he was again feeling fine at this point.

Six days later (February 10), while driving his car, he was seized by progressively severe substernal and bilateral arm pain, and was barely able to drive home. When examined there he appeared to be in moderate discomfort, though no clinical signs of shock were present. The general physical examination was again negative, and blood pressure, pulse, and respiration were normal. The oral temperature was now 95.8 F, with an axillary reading of 95.2. He was admitted to the coronary care unit where, based on a SGOT accumulation of 195 units, in the presence of typical monophasic ST configurations with pathological Q-waves, a diagnosis of acute anterior transmural infarct was later made.

Discussion

It is our belief that virtually all acute myocardial infarctions are accompanied by some degree of reflex systemic vasospasm; and as a result of our experience here we feel that body temperatures can supply a simple key to the prompt diagnosis of coronary occlusion by mirroring this underlying cardiogenic shock. So sensitive is the body's thermostatic mechanism to shock that relatively minor cardiac crippling may cause a precipitous drop in extremity and axillary temperatures. Moderate to severe shock is usually heralded by a similar and simultaneous decline in the oral temperature.

In 23 patients whose urinary output we were better able to quantitate with indwelling catheters, we found temperature monitoring to possess equal sensitivity as

a shock indicator. Moreover, in the 7 cases in which we had the patients under observation at the time of extension or recurrence of a shock-producing infarction, a decline in temperature preceded clinical shock by from one to six hours.

Temperature monitoring, furthermore, permitted better estimation of the depth and progression or regression of circulatory collapse already complicated by anuria. However, during the recovery phase of shock, temperatures tended to rise well in advance of the urinary output. Whether this represented persistent selective renal vasospasm or merely a post-shock delay in diuresis is speculative. It is therefore worthy of emphasis that hypothermia is significant in diagnosis only by virtue of its presence, not necessarily by its absence. Another reason is that the sometimes transient shock phase, together with any associated temperature drop, may already have subsided before the patient is first seen, or it may appear briefly between temperature readings and hence be missed entirely.

In milder forms of shock, according to our observations, the axillary reading is usually below normal and undercuts the oral by a wider gap than the customary fraction of a degree. Five of our acute myocardial infarct patients sustaining shock failed to show an unequivocally subnormal oral temperature. All, on the other hand, demonstrated some degree of axillary hypothermia during the shock phase. In more advanced vascular collapse, the tongue and mouth become hypothermic, plummeting the oral temperature. The rectal temperature ordinarily does not fall even with more severe shock, since it appears to reflect the last part of the circulation to be compromised. In fact, it may even be markedly elevated in the presence of subnormal oral and or axillary values. For this reason, a febrile process often goes undetected in the shocked patient when only oral temperatures are used as a guide.

Physiological variations in body temperature depend on such changing factors as time of day, season, environmental temperature,

humidity, emotional state, physical activity, endocrine status, diet, age, and of course, the individual himself. Furthermore, oral readings in different healthy persons may occasionally range as low as 96.6 or as high as 100 degrees F.³ Nevertheless, radical departures below a mean of 98.2 are, in our experience, uncommon in health as well as in most disease states not directly involving shock. In 75 randomly selected adults in good health or with minor nonfebrile complaints, we compared axillary and oral temperatures in winter, the season of maximal physiological hypothermia. Although a third of these subjects had oral temperatures below 98 degrees, none was below 97.0. Furthermore, this same hypothermic third failed to show correspondingly depressed axillary temperatures (the lowest being 96.8); and consequently most of them displayed very little or no difference between readings secured by the axillary and sublingual routes.

Summary

Some degree of cardiogenic shock nearly always accompanies acute coronary occlusion, but unless profound, it is often difficult or even impossible to diagnose promptly by conventional means.

A simple procedure for promptly detecting and monitoring cardiogenic shock (and hence confirming suspected myocardial infarction) is herein described. The technique lies merely in following the axillary and oral temperatures, with special attention directed to the proverbially "unimportant" subnormal temperature ranges. Tissue hypothermia resulting from compensatory vasoconstriction and shunt formation accom-

panying even minor cardiac crippling provides an extremely sensitive, indirect indication of circulatory impairment. Therefore, body temperature measurements can provide an index to underlying cardiogenic shock which approaches in sensitivity that obtained by monitoring urinary output with an indwelling catheter. Since the hypothermic process starts peripherally and progresses centrally, extremity and axillary temperatures usually fall earlier and are affected by lesser degrees of shock than are the oral.

Temperature ranges for various degrees of shock based arbitrarily on our series of cases are as follows: Axillary temperature less than 95 F and oral temperature less than 96 F—severe to moderate shock. Axillary temperature 95 to 96.6 F and oral temperature above 96 F—moderate to mild shock. Sudden drop of two degrees or more in a previously normal or subnormal axillary temperature—possible impending or deepening shock.

In this series of 22 cases of proven acute myocardial infarction, 2 cases of left-sided failure from mitral disease, and 2 cases of congestive failure complicating hypertensive heart disease, axillary temperatures were found to be valuable in detecting and following all degrees of cardiogenic shock, paralleling in sensitivity the urinary output as an early indicator.

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Radionuclide Procedures in Placental Localization

ROBERT H. WILKINSON, JR., M.D.

Prior to the development of placental localization by radionuclide procedures, the evaluation of placental position was limited to manual examination and roentgenographic procedures. Manual vaginal examination has been unpopular because it carries the attendant risk of inducing hemorrhage. The roentgenographic placental procedures include soft tissue placentography and placentography using radio-opaque contrast material. These studies involve considerably more exposure of the mother and fetus to radiation as compared with radionuclide placentography. Since the clinical introduction of radionuclide localization, thermographic and ultrasonic placentography have been developed and will be briefly discussed later.

The physiological factors which have made radionuclide placental localization studies possible involve the slow passage of blood through the highly vascular placenta and the relative "pooling" of blood within the placenta.

Clinically, radionuclide placental localization has been of greatest value in the study of gravid patients presenting with vaginal bleeding during the second or third trimester. The diagnosis of placenta previa is of paramount importance in the care of such patients. Radionuclide placental localization has also proved useful in the performance of amniocentesis and intrauterine fetal transfusions.

Radionuclide placental studies may be divided historically and methodologically into two categories. The first is multiple-point count ("sector counting") monitoring of the gravid abdomen. The second is the image recording of the placenta, employing a conventional rectilinear photoscanner or a stationary imaging device such as the Anger scintillation camera. Placental imaging became possible only after the develop-

ment of certain short-lived radionuclide tracers. These radiopharmaceuticals could now be administered safely at tracer activity levels sufficient to provide valid image recording.

Brown and Veall,¹ in 1950, were the first to report a radionuclide placental localization procedure. They used Na-24 labeled sodium chloride, and monitored the gravid abdomen by the "sector counting procedure." In 1957 successful placentography was achieved by Weinberg and others² using iodine-131 labeled human serum albumin (HSA). Subsequent investigators have recommended the following radiopharmaceuticals for placentography: iodine-132 labeled HSA,³ chromium-51 labeled erythrocytes,^{4,5} chromium-51 labeled HSA,⁶ and iodine-125 labeled HSA.⁷

The first acceptable radionuclide placental imaging procedure was reported by McAfee and others⁸ in 1964. These authors used technetium 99-m labeled HSA as their tracer, and recorded the image on a conventional rectilinear scanner. Subsequently several other tracers have been recommended for radionuclide placental imaging. These are indium-113m transferrin,⁹ technetium 99-m sodium pertechnetate,¹⁰ carbon-11 carbon monoxide *in vitro* labeled erythrocytes,¹¹ and strontium 87m.¹²

Radionuclide Placentography

Radionuclide placentography is the placental localization procedure in which the tracer activity is monitored over the gravid abdomen by a multiple point ("sector") counting procedure. The data are recorded, and the area of greatest activity establishes the placental location. This method is readily adaptable to the facilities available in the nuclear medicine laboratory of the average community hospital. The radiopharmaceuticals employed are commercially available, and the licensing requirements are fulfilled in most physician training programs.

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Materials, methods, and interpretation

The instruments consist of a scintillation detector and scaler with or without spectrometric capability. Our scintillation detector consists of a 2-inch sodium iodide (Th activated) crystal with lead shielding and recessed within a flat field collimator.

Iodine-131 labeled HSA and Cr-51 labeled HSA are the most frequently employed radiopharmaceuticals. These tracers are administered intravenously. Five microcuries of I-131 labeled HSA or 35 microcuries of Cr-51 labeled HSA are utilized. If the I-131 labeled HSA is used, it is necessary first to prepare the patient by administering Lugol's solution in order to "block" the thyroid uptake of free I-131. The administration of Lugol's

The patient lies beneath the detector in the supine position. The gravid abdomen is divided into multiple squares with a marking pencil (Fig. 1). A diagram including the same number of squares is used to record the data. The number of sector-squares used by various investigators has varied from as many as twenty-one¹³ to as few as nine;¹⁴ fourteen equal squares are clinically acceptable. The radionuclide tracer is administered intravenously and each square is individually monitored with the detector. The counts per minute (cpm) for each square are recorded in the corresponding square on the diagram. The precordium is then monitored and the cpm recorded.

At this point the diagram may be interpreted, or the cpm for each square may be converted to a percentage of the precordial cpm. This added step can make interpretation easier (See Fig. 1.). The placenta is localized on the diagram by noting those squares which have the greatest percentage of tracer activity. A second mathematical step preceding interpretation has been proposed. This involves averaging the percentages for all the squares and interpreting the placenta as being present in any squares (sectors) which have a greater percentage than the "average."¹⁵

Ward¹⁶ has described a method for determining the anterior or posterior location of the placenta. With the patient in the supine position, a horizontal line is drawn along the lateral aspect of the abdomen at the level of the anterior superior iliac spine. This is performed bilaterally. Counts are now taken above and below this line at the level of the umbilicus on both sides of the abdomen. Ward states that the level of greater tracer activity is indicative of the anterior or posterior position of the placenta.

While the placenta can be identified in the lower uterine area, it may be difficult, if not impossible, to distinguish accurately between a low-lying marginal placenta and a partial placenta previa. A placenta previa totalis is more easily interpreted.

Radionuclide Placental Imaging

Radionuclide placental imaging is the

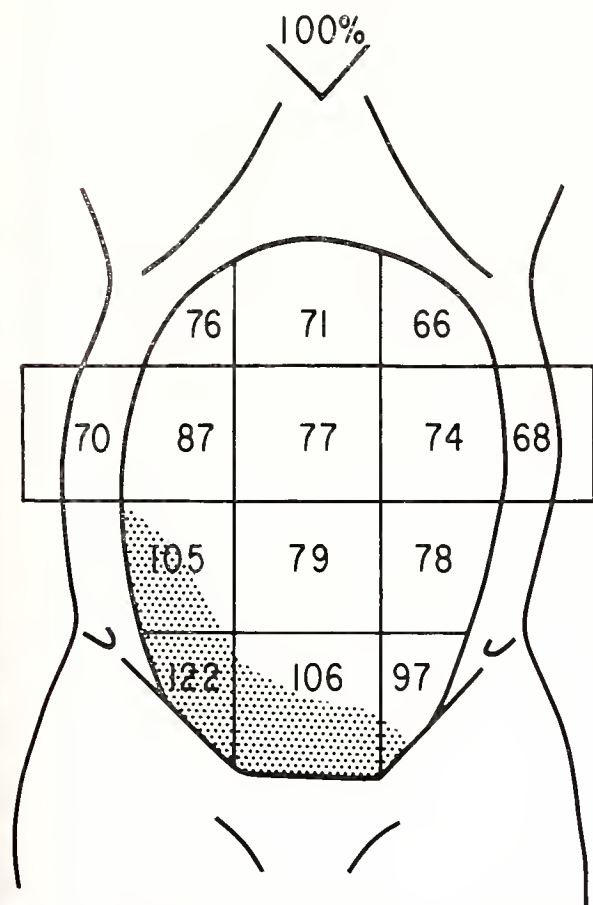


Fig. 1. Radionuclide placentography diagram. Sector count is recorded as a percentage of the precordial count. The shaded area represents the placenta previa.

solution is continued for three days after the study. Premedication is not necessary when Cr-51 labeled HSA is used.

placental localization procedure in which the gravid abdomen is imaged by a rectilinear scanner or stationary imaging device following the administration of a radionuclide tracer. The placenta is identified as the area of greatest tracer activity within the uterus.

The radiopharmaceutical and or equipment requirements restrict the utilization of this procedure. If Tc-99m labeled HSA or In-113m transferrin are used, the laboratory must have the appropriate facilities and licensing for their preparation. If a stationary imaging device such as the Anger-type scintillation camera is available, the investigator can use Tc-99m sodium pertechnetate. This tracer is commercially available and licensing requirements are covered in most physician training programs.

Materials, method, and interpretation

Technetium 99m labeled HSA, In-113m transferrin and Tc-99m pertechnetate are the commonly employed tracers. We use Tc-99m labeled HSA for placental imaging. Several other radiopharmaceuticals have been proposed but are less clinically suitable at this time.^{11,12,17}

The intravenous dose for Tc-99m labeled HSA is between 0.5 millicuries¹⁸ and 1.0 millicuries.^{8,12} If Tc-99m pertechnetate is used, the intravenous dose is 300 microcuries.¹⁰ Some authors recommend premedication with Lugol's solution.¹⁰ If Tc-99m pertechnetate is used, a stationary imaging device or multi-crystal scanning device is necessary, since there is only a short interval during which the placenta can be satisfactorily imaged.

We routinely obtain an anterior and lateral view with either type of instrument. When imaged with the rectilinear scanner, the anterior view is scanned from the pubis to the xiphoid in order to record as little bladder tracer activity as possible. We routinely mark the "right" or "left" side and the level of the superior aspect of the symphysis pubis.

The lateral image is taken with the detector facing the patient's side nearest the placenta. This position can usually be determined by examination of the initial anterior

view. The rectilinear scanners and stationary imaging devices will delineate the gravid abdomen with the patient turned on her side. Only the stationary imaging devices can obtain the "cross-table" lateral view in which the patient is supine and the camera detector is directed toward the patient's side. The "crosstable" lateral view is preferable to the lateral decubitus view because it is more comfortable for the patient, there is less abdominal rotation secondary to the enlarged and mobile gravid abdomen, and palpation of the symphysis pubis for marking purposes is far easier in this position. At the conclusion of the study the level of the symphysis pubis as well as any other areas which might be desired (such as the umbilicus) is marked on the film image.

Occasionally tracer activity within the bladder will obscure the lower level of the placental tracer activity. A post-voiding pelvic view may then be obtained. On rare occasions, catheterization is necessary, but this is avoided if at all possible. Indeed, a small amount of tracer material in the bladder is frequently helpful in locating the level of the cervix. In addition to imaging the tracer within the bladder, the tracer activity within the liver and kidneys may be imaged as well.

Both the rectilinear scan views and stationary imaging device views will demonstrate an oval rim of tracer activity representing the uterine wall. The placenta is visualized as a large area of increased tracer activity within this rim. Its position in relation to the symphysis pubis marker will determine the proximity of the placenta to the internal cervical os.

Nelp and Larson¹⁸ established the level of the external cervical os in the anterior scanning position to average 3.5 cm cephalad to the midpoint of the symphysis pubis. In the lateral position the external os was an average of 2.4 cm cephalad to a line drawn from the greater trochanter to the pubis symphysis. Some difficulty may be experienced in interpreting a low-lying placenta from a placenta marginalis. The partial placenta previa or placenta previa totalis is generally easier to interpret.

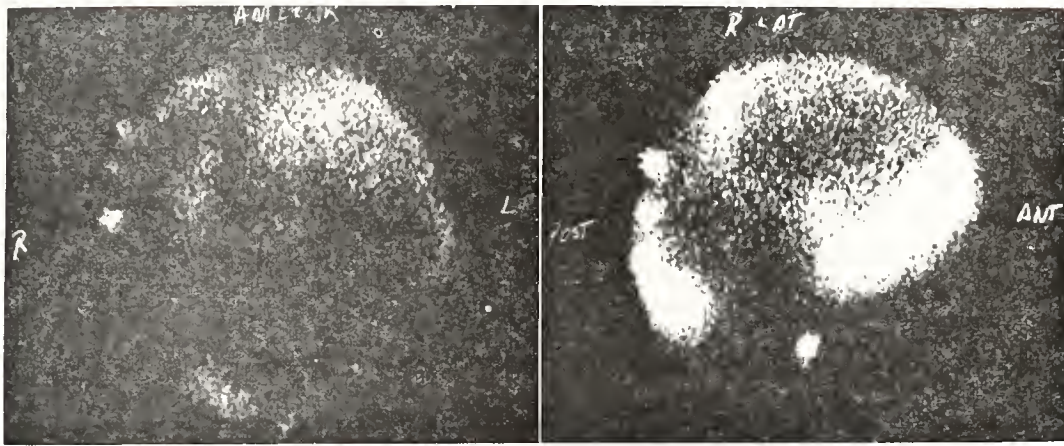


Fig. 2-A. Anterior scintiphoto of a normal placenta in the uterine fundus. B. Right lateral scintiphoto in the same patient. Note that the placenta is anterior.

Figures 2A and 2B illustrate the anterior and lateral scintiphoto views of a normal placental implantation. These images were obtained with the stationary Anger-type scintillation camera.* The placenta is identified on the anterior view as an area of confluent white dots in the upper right quadrant of the scintiphoto image. The placenta is in the fundus of the uterus. The lateral view demonstrates the placenta to be in the anterior aspect of the uterus. The bladder is imaged as a white bean-shaped area in the left lower quadrant of the scintiphoto. A

kidney is imaged in the right upper quadrant.

Figures 3A and 3B are conventional rectilinear scan views of a patient with a placenta previa totalis. Figure 3A is the initial anterior scan. The arrows point to the placenta, which is located at the base of the uterus and over the internal cervical os. Figure 3B is a left lateral scan and also demonstrates the placenta previa. The lateral scan was followed by a post-voiding pelvic anterior scan. This final scan (which is not shown) excluded any question that this area of tracer activity might represent a distended bladder.

*Phogamma III, Nuclear Laboratories, Chicago.

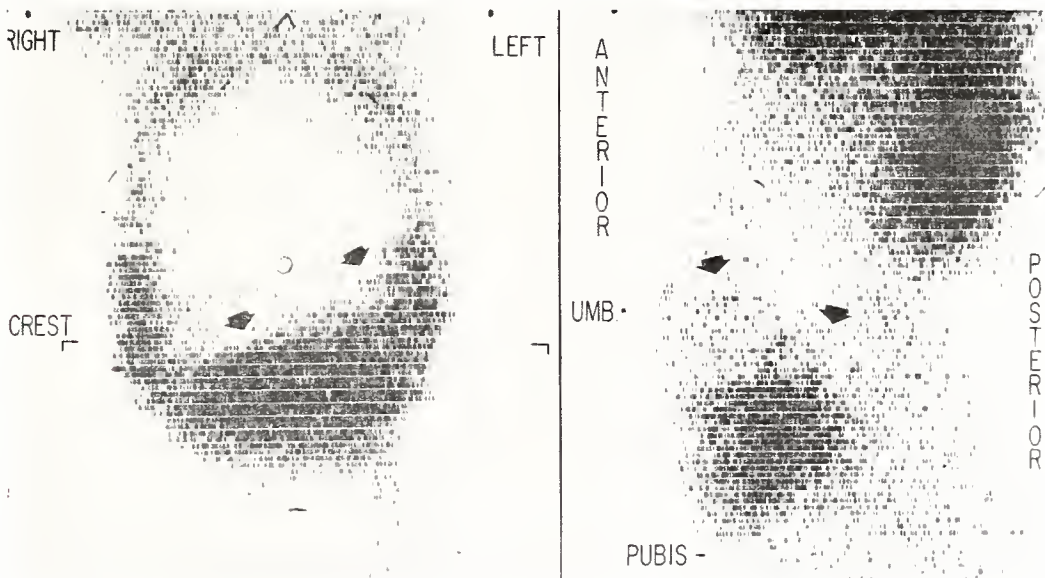


Fig. 3-A. Anterior rectilinear scan view of a placenta previa. B. Left lateral rectilinear scan view of the same placenta previa.

Table 1

Authors	Year	Radionuclide Tracer	Placentography			Tracer	Radionuclide Placental Imaging		
			Total Cases	No. Correctly Interpreted	Per Cent Accuracy		Total Cases	No. Correctly Interpreted	% Accuracy
Hibbard ³	1961	131-I HSA	200	197	98.5				
Paul et al ⁵	1963	51-Cr RBC							
Johnson et al ¹⁹	1966	131-I HSA	49						
				83	96.5				
		51-Cr HSA	37						
Johnson ²⁰	1967					99m-Tc HSA	26	34	94%
Ward ¹⁶	1967	131-I HSA	28	23	100				
Shapiro and Shaul ²¹	1967	131-I HSA	75	72	96				
Sonnendecker et al ²²	1967	131-I HSA	11	7	64	99m-Tc HSA	20	20	100%
Krohn et al ²³	1967					99m-Tc HSA	27		100%
						131-I HSA	61		97%
Lavine et al ¹⁰	1967	51-Cr RBC	6	6	100	99m-Tc	18	18	100%

Discussion

Our experience with placental localization within the past two years has been restricted to radionuclide placental imaging. For the community hospital without access to the newer radiopharmaceutical scanning agents and equipment, radionuclide placentography is a more practical procedure. Placentography is also a less expensive study than placental imaging. Placental imaging on the other hand, provides an image concept of the placenta which is not possible with placentography. This is of greater assistance in a proposed amniocentesis or intrauterine fetal transfusion.

Table 1 lists several reported series^{3,5,10,19-23} in which radionuclides were used for placental localization and indicates the degree of accuracy for the two methods employed. With the exception of the unusually low percentage of accuracy for placentography reported by Sonnendecker,²² the statistics would suggest little difference in interpretative accuracy of the two procedures. Our experience at Duke University Medical Center has been similar to that reported by Johnson²⁰ and Krohn and colleagues.²³

Table 2

Estimated Maternal and Fetal Absorbed Doses of Tracers Used in Placental Localization

Radio-pharmaceutical	Dosage of Nuclide (millicuries)	Maternal		Fetal
		Total Body Dose (millirads)	Body Dose (millirads)	
131-I HSA	5	15	6.5 ²¹	
		44	5.0 ⁴	
	3	10	4.0 ¹³	
	5	5	5.0 ²⁵	
51-Cr RBC	20	12	8.0 ⁵	
99m-Tc HSA	1000	13	14.0 ^{*8}	
	500	3	5.0 ¹⁵	
99m Tc pertechnetate	300		5.0 ¹⁰	
11-C monoxide	500	5.5	4.0 ¹¹	

*94% of this dose is from the mother.

Table 2 presents the reported calculated maternal and fetal absorbed total body dosages for the various tracer agents.* In all instances the dosages are strikingly lower than the reported 200 to 300 milliroentgens received by the mother and fetus from a single anterior-posterior abdominal roentgenogram.⁸ We have confirmed the reported roentgenogram exposure dosage if pelvimetry technique is used. Using our routine

References 4, 5, 8, 10, 11, 13, 18, 24, 25

pelvimetry technique, a "female" phantom with a Victoreen condenser chamber positioned in the anterior-posterior pelvic mid-plane received an exposure dosage of 250 milliroentgens.

The most recent non-radionuclide studies for placental localization have been thermography and ultrasonic placentography. Birnbaum²⁵ has reported an accuracy rate of 96.3% in using thermography for predicting placental position. Johnson,²⁶ in a comparative study of both procedures, reported correct localization with radionuclide placentography in 98% of his cases as opposed to only 50% with thermography. At this time, thermography is not believed to offer a significant challenge to the radionuclide studies.

Ultrasound placentography offers considerable promise. Gottesfeld and associates²⁷ report accurate localization in 112 cases. More recent reports by other investigators have indicated similar success. At the present time, the number of personnel trained in this field is very limited.

Conclusion

Radionuclide placental localization may be divided into two forms: (1) multiple point count placentography and (2) placental imaging. These procedures are outlined and the merits of each study discussed briefly. Statistics would indicate that the two procedures are equally acceptable. Radiation hazard to mother and fetus is negligible, and is far less than that associated with a single anteroposterior abdominal roentgenogram. Radionuclide placental localization is of definite value in the identification of placenta previa, and is useful in placental localization preceding amniocentesis or intrauterine fetal transfusion.

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Early Transportation of the Severely Burned Patient

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In the United States more than 70,000 patients are hospitalized each year for major burns. Burns that require immediate hospitalization are second- and third-degree burns involving more than 15% of the body surface in children and 20% in adults, and burns of the face, hands, or perineum. The treatment of a major burn requires not only an experienced staff of physicians and nurses, but satisfactory physical facilities, a constantly available laboratory service, and a host of ancillary help, such as physical therapists and inhalation therapists. Because of these requirements, the average practicing physician, who may go for some time without seeing a major burn, usually elects to transfer the patient to a large surgical center where multidisciplinary services are available and the problem can be handled with greater ease. Thus the average physician is concerned mainly with the immediate treatment of the patient rather than with long-term care.

Immediate care in preparation for transportation is relatively simple, provided an effective plan is made and followed. All too often a burned patient is transferred without the initiation of resuscitative measures, resulting in increased morbidity.

A recent case seen at North Carolina Baptist Hospital illustrates the problem.

Case Report

A 7-year-old boy was seen in the emergency room approximately three hours after sustaining second and third degree burns involving 50% of the body surface, including the hands, arms, anterior and posterior aspects of the thorax, the neck, face, tongue, and palate. He had apparently been playing with a gasoline can and matches at the time of injury. Shortly afterward he was seen at his local hospital, and arrangements were made to transfer him to the North Carolina Baptist Hospital.

He arrived at the emergency room accompanied only by ambulance attendants and wearing the same clothes he was wearing at the time of the accident. No therapy

had been instituted. The blood pressure was unobtainable, the pulse 160, and respiration 40. The bladder contained 15 ml of dark urine. A total of 2,700 ml of lactated Ringer's solution was administered over a period of 5½ hours, and a nasotracheal tube was inserted. The blood pressure then was 110 systolic, 80 diastolic, the pulse 110, and respiration 20. The output of urine was satisfactory. After the initial hypovolemic shock was corrected, he did relatively well for several days, only to die of respiratory complications on the eighth day following the injury.

With relatively simple measure, this child could have been prepared for transportation and thus would not have arrived at this hospital in a state of severe dehydration and hypovolemic shock. The safest time to transfer a severely burned patient is within the first 24 to 36 hours following injury,^{5,6,11} provided appropriate measures have been carried out. The major single error in the transportation of these patients is the failure to initiate therapy before moving them to combat dehydration and resulting hypovolemic shock. The rapid loss of fluid which occurs mainly during the first 24 to 36 hours, though not completely understood, is felt to be a result of increased capillary permeability with external loss, and, more important, a greater loss into the interstitial space. The result is hypovolemic shock, unless the fluid is replaced.^{1,13} It must be remembered that the fluid requirement does not begin when the patient reaches the emergency room, but at the time of the initial burn.

Following is a simplified outline for preparing severely burned patients for transportation.

Preparation for Early Transportation

A. Mandatory measures

1. Take a brief history and perform a rapid and complete physical examination.
2. Stabilize respiration.
3. Secure an adequate, safe intravenous infusion.
4. Initiate fluid replacement.

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Request for reprints to the Department of Plastic Surgery, Norfolk General Hospital, Norfolk, Virginia.

5. Place Foley catheter in bladder.
 6. Maintain a satisfactory level of urinary output.
 7. Institute nasogastric drainage.
 8. Dress burns with dry sterile bulky dressings or cover patient with clean sheets and blankets.
 9. Give appropriate dose of morphine intravenously.
 10. Record all therapy, including medication.
- B. Desirable additional measures
1. Cleanse wound with soap and saline and debride loose skin.
 2. Weigh patient.
 3. Actively or passively immunize against tetanus.
 4. Provide protection for possible beta hemolytic streptococcal infection.

Discussion

An adequate history and complete physical examination are often omitted from the early management of the severely traumatized patient, the physician focusing his attention on the more obvious injuries. The responsible physician must be certain that there are no additional injuries—for example, a severe chest or abdominal injury which would take precedence over a burn and require immediate therapy.

All rules to estimate the extent of a burn are estimates. The rule of nines is simple and satisfactory provided one remembers to give the head and trunk more weight in children. Estimating the depth of a burn is difficult in the immediate postburn period and is not really essential, since the therapy will depend on the response of the patient. A burn of 15% or more in a child and 20% or more in an adult is generally considered a major burn and requires hospitalization and intravenous fluid therapy. An inadequate history may fail to disclose such matters as essential medication, a heart condition, diabetes mellitus, or any number of other significant problems.

Burns about the face, back, and chest may create additional problems. While actual thermal burns below the glottis in patients who survive the initial injury have never

been encountered at Brooke Army Medical Center,⁹ respiratory insufficiency secondary to a burn of the pharynx and resulting in edema can occur during the first few hours or days. In addition, inhalation of smoke can result in this complication. Although tracheostomy is rarely required during the first few hours, if there is any question of respiratory insufficiency, the patient should not be transferred, unless he is accompanied by a physician capable of performing a tracheostomy or endotracheal intubation. Rarely, a circumferential burn of the chest may cause respiratory embarrassment in the first few hours and require an escharotomy.

The necessity for securing a safe, adequate route for the administration of fluids in a patient who has to be transported to another hospital cannot be overemphasized. All too often a patient arrives at the emergency room with infiltration of fluid into tissues from an intravenous needle which has been placed improperly or dislodged. A cut-down is probably the safest method to use during transportation, but if adequate veins are available this measure is not necessary. Whatever method is chosen, the intravenous tube must be stabilized sufficiently so that it will not be dislodged during transportation.

The various formulas used for fluid replacement are based on estimates of the depth and extent of the burn. In spite of the many arguments favoring the Brooke formula, the Evans formula,¹⁰ modifications of these two formulas,^{6,8} or the use of lactated Ringer's solution alone,^{3,4} any of these is satisfactory during the first few hours. Perhaps lactated Ringer's solution is the easiest to keep in mind. This is a widely available solution and gives satisfactory results during the first few hours. Baxter^{3,4} advocates the use of 4 ml of lactated Ringer's solution per 1% burn per kilogram of body weight during the first 24 hours. After the first 24 hours a diminishing amount is required.

No matter what formula is chosen, the patient's response is the important factor.

This response can be monitored by following the output of urine (0.5-1.0 of clear urine per kilogram of body weight per hour is usually satisfactory),⁶ the specific gravity of the urine, the blood pressure, pulse, central venous pressure, state of consciousness, and serial hematocrit values.^{3,7,8,13} Of these parameters, the rate of urine formation is the best single indication of the patient's response to therapy. A urinary output of less than 0.5 ml per kilogram of body weight per hour may require massive replacement with electrolytes or colloid solutions. This situation can be particularly striking in children, who normally have a much more rapid turnover of fluid and may require 25% to 50% more fluid than various formulas suggest. The rate of intravenous infusion can be increased or decreased by ambulance personnel to maintain a satisfactory output of urine. The only way to follow the urinary output accurately in a severely burned patient is to use an indwelling Foley catheter.

A problem usually encountered in a severely burned patient is that of paralytic ileus, which may be accompanied by vomiting and possibly aspiration. Any burn exceeding 15% in children and 20% in adults will probably cause some paralytic ileus, and nasogastric drainage or suction should be instituted. With proper fluid therapy the ileus will be resolved in 24 to 36 hours and the nasogastric tube can be removed.

In addition to the fluid loss from the burn wound, one must keep in mind that the burned skin is unable to conserve heat and will lose many times the calories per surface unit than normal skin.^{5,6} This can result in rapid heat loss and hypothermia. Conservation of heat is desirable and requires a bulky dressing or clean sheets and blankets to maintain a normal temperature during transportation. If the transfer takes no more than a few hours and only one vehicle is to be used, clean sheets and blankets will be adequate. However, if the trip is longer and requires removal of the patient from one vehicle to another, with a possibility of dislodging the dressings, a dry, sterile, bulky dressing is better. Open therapy has no place in the transportation of a

burned patient, though it may be initiated later if desired.

Because of the vasoconstriction that accompanies all major burns, the intramuscular administration of analgesics will not be satisfactory. Whenever an analgesic is used, it must be given intravenously to be effective. An appropriate dose of morphine is used by most physicians treating burns.

The necessity of recording all therapy cannot be overemphasized. Any medications which may affect treatment at the center to which the patient is being moved should be known in order to avoid duplication.

Generally, the easiest time to clean a burn is shortly after it is sustained. At this time the patient will be able to cooperate, since he is usually well oriented and his joints are not affected by edema. Any foreign bodies such as soot can be removed much more easily during the first few hours, thus avoiding tattooing of the skin. Wearing a mask and sterile gloves, the physician debrides all blisters (except those on the palmar and plantar surfaces) and loose skin after cleansing the wounds with soap and saline. While this is not essential prior to transportation, it is desirable if time permits and facilities are available.

As all fluid formulas are partially based on the weight of a patient, it is desirable to weigh him as soon as possible. Edema rapidly develops once fluid therapy is initiated, and the correct weight is unobtainable. As mentioned earlier, however, it is the patient's response to fluid administration that is the determining factor, and while weighing the patient is desirable, it is not necessary.

Although infection is a major problem in the later stages of burns, it does not occur in the first 24 to 48 hours in the adult. Though not common, sepsis has been encountered in the first two days in children. Certainly it should not arise in the first few hours. If the patient is not allergic to penicillin, 600,000 units of procaine penicillin can be given prior to transportation or at some time during the first 24 hours, and repeated at 12-hour intervals for four or

five days as protection against the possibility of an early beta hemolytic streptococcal infection.^{12,14} If the patient is allergic to penicillin, tetracycline or erythromycin is a satisfactory substitute.

Active or passive protection against tetanus should be instituted. If the patient has been actively immunized against tetanus, 0.5 ml of tetanus toxoid should be given as a booster. If he has not, he should be given approximately 4 units of human tetanus antitoxin per kilogram of body weight (250 units for the average adult) intramuscularly. In addition, the patient who has not been actively immunized should be started on a course of tetanus toxoid, 0.5 ml initially, to be repeated in two to three weeks and again at six weeks.

It is not necessary to apply topical antibacterial agents during the first few hours. The use of nafernide acetate (Sulfamylon), 0.5% silver nitrate, the open method, or any other form of topical treatment can probably be delayed as long as 48 hours, except perhaps in children, without adversely affecting the outcome.¹¹

Summary

An attempt has been made to outline a relatively simple program for preparing a severely burned patient for early transportation to a referral center. Both necessary

and nonessential but desirable measures have been discussed. Of the necessary measures, the initiation of appropriate intravenous fluids is the most often omitted. The necessity to combat hypovolemic shock in the severely burned patient cannot be over-emphasized.

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The Carcinoid Tumor, Syndrome and Spectrum

A Review of the Literature

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(Conclusion)

Diagnosis of Carcinoid Tumor and Syndrome

In the previous section the clinical and roentgen features of carcinoid tumors according to location was reviewed. This section will deal primarily with laboratory methods useful in the diagnosis of "functioning" carcinoid tumors.

There is usually no difficulty in recognizing the complete carcinoid syndrome; however, a single sign or symptom may be the sole clue to a functioning tumor. Often the initial signs and symptoms may mimic other diseases. The cutaneous flush, for example, could be confused with other types of vasomotor instability such as the menopausal flush, or perhaps with a decreased oxygen saturation. The intestinal hypermotility simulates acute or chronic diarrheal diseases, even functional gastrointestinal disorders. Paroxysmal dyspnea and wheezing are seen in a variety of bronchospastic disorders. Hepatomegaly and cardiac valvular disease may simulate rheumatic heart disease.

The following procedures have generally proved useful in diagnosis. The *epinephrine provocative test*¹¹⁴ is performed by the intravenous administration of small amounts of epinephrine, 0.6 to 5 micrograms, in an attempt to reproduce the flush in those patients who describe spontaneous flushes. The appearance of a typical flush, often associated with hypotension and tachycardia, between 45 and 90 seconds after the epinephrine injection constitutes a positive reaction.⁵³ Failure to induce a flush does not exclude the diagnosis in patients who do not have spontaneous flushes. It has been found recently that conjunctival vascular injection and concurrent lacrimation with a fall in ophthalmic artery pressure may be an

early sign of either a spontaneous or epinephrine-induced carcinoid flush.¹⁵⁰

The demonstration of increased urinary 5-hydroxyindolacetic acid is perhaps the simplest qualitative screening test available, and usually confirms the diagnosis of carcinoid syndrome regardless of the type of 5-hydroxyindole that predominates in the urine.¹⁵¹ 1-Nitroso-2 naphthol and nitrous acid is added to a small aliquot of urine to yield a purple color.¹⁵² Normally, 24-hour urinary 5-HIAA values range between 2 and 8 mg, whereas a positive reaction occurs with levels above 40 mg. Most patients with functioning carcinoids, however, have urinary 5-HIAA values over 100 mg. False positive reactions have been reported from acetanilid and related drugs,¹⁵¹ phenothiazines,¹⁵³ methocarbamol, and mephenesin,¹⁵⁵ in conditions in which keto acid excretion is high,¹⁵¹ following ingestion of bananas¹⁵⁴ or pineapple juice¹⁵⁵ and in Whipple's disease and sprue.¹⁵⁶ Finally, increased serotonin production may occur in primary or secondary neoplasms of the liver, pancreas, bladder, and larynx.¹⁵⁵

When a carcinoid tumor is suspected and the simple qualitative urine test is negative, a quantitative urine assay should be performed to detect lesser abnormalities of 5-HIAA excretion.¹⁵⁷ The quantitative test is based on the reaction of indole derivatives with Ehrlich's aldehyde to yield a blue color. Although Mohler¹⁵⁸ first reported no false positives in more than 1,000 patients using the qualitative test, the possibility of false positives in fact exists, and it is recommended that all medications be withheld for 48 hours before and during the urine collection.

Measurements of circulating serotonin are not as simple or accurate as the urine tests, but may be necessary in cases of carcinoid syndrome associated with hyperserotoninemia but normal 5-HIAA excretion.¹⁵⁹

Other less commonly used diagnostic tests

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include the serotonin skin sensitivity test, the measurement of urinary 5-HIAA after reserpine administration, and the tryptophan loading test.¹⁵⁹

An infrequent radiographic feature of carcinoid tumors not previously mentioned is an osteoblastic type of skeletal metastasis. Since osteoblastic lesions typically occur with carcinomas of the breast, prostate, and lymphomas, carcinoids are less frequently considered in differential interpretation of this roentgen finding.¹⁶⁰

It should be emphasized that carcinoid tumor ought to be considered in patients with evidence of widespread metastatic disease in whom an unexpectedly benign clinical course occurs.

Treatment

The treatment of carcinoid disease may be grouped into five general categories: (1) surgical, (2) medical, (3) radiotherapy, (4) chemotherapy, and (5) supportive therapy.

1. Surgery

Surgery is the treatment of choice in localized carcinoid disease.¹⁶¹ Medical measures are largely reserved for palliation of symptoms, for support during anesthesia, for care during the "carcinoid crisis,"¹²⁴ and for general supportive treatment. Resection of the primary carcinoid tumor prior to metastasis is obviously the ideal treatment. Unfortunately this is rarely achieved unless laparotomy has been undertaken for other reasons, or unless the tumor is identified on a routine chest film, rectal examination, or sigmoidoscopy. Since the clinical manifestations of carcinoids in various locations are usually recognized only in retrospect, and because most primary carcinoids are asymptomatic, the tumor is often not detected until it has metastasized. The following surgical procedures have been suggested for the management of carcinoids according to their primary locations.^{40,42,155}

For *gastric* carcinoids the procedure of choice is a subtotal gastric resection including the greater and lesser omentum.

For *duodenal* carcinoids the procedure depends on the area involved. Local excision

with restoration of intestinal continuity by either gastroduodenostomy or gastrojejunostomy and closure of the duodenal stump is suggested for carcinoids found in the first part. Lesions in the second part are the most difficult to manage. The choices include (1) pancreaticoduodenectomy or partial excision of the tumor in an attempt to remove as much of it as possible, avoiding resection of the ampulla of Vater; or (2) a radical operation in which portions of the pancreatic and common bile duct are excised and a major reconstructive procedure done. Following the first procedure, local recurrence may be anticipated within a few years. With the second choice, there is a mortality of 5%-15%.

For *jejunal or ileal* lesions, wide resection of the involved bowel and mesentery on either side of the tumor is recommended. Lymph node involvement from even the smallest primary lesion demands that every attempt be made to remove a large wedge of mesentery, carrying the incision as close to the superior mesenteric artery as possible. A right hemicolectomy is suggested for lesions of the terminal ileum.

Simple appendectomy is usually sufficient treatment for *appendiceal* carcinoids. If nodes are involved or if the base of the cecum is invaded, a right hemicolectomy with wide excision of the mesocolon should be performed. Some authors recommend right hemicolectomy, if microscopic examination discloses tumor invasion of the lymph vessels of the distal appendix, and for all carcinoids found at the base.¹⁶²

Because of the high incidence of metastasis, carcinoids of the *cecum* or *colon* should be treated by hemicolectomy.

The preferred procedure for *rectal* carcinoids depends on the size of the primary tumor. Local excision with follow-up by sigmoidoscopy at regular intervals is sufficient for lesions measuring 2 cm or less which are confined to the submucosa. If there is a recurrence, radical surgery is indicated. Lesions greater than 2 cm or those showing evidence of infiltration or ulceration should be removed, with wide excision and lymph node dissection, through an an-

terior rectosigmoidal approach or by combined abdominoperineal resection.

Primary carcinoids of the *gallbladder* are adequately treated by cholecystectomy.

Carcinoids within a *Meckel's diverticulum* are managed by simple wedge resection.

The surgical approach to *bronchial* carcinoids must be individualized. Local excision is adequate in the majority of instances, but if portions of the lung distal to the tumor have been compromised, the diseased area must be totally resected.

Surgical treatment may also be palliative, such as bypass procedures for intestinal obstruction.¹⁶² Symptoms of the carcinoid syndrome may be temporarily relieved by resection of large secondary tumor masses, particularly in the liver and mesentery.¹⁶³ On occasion this may forestall the development of pathological changes in the heart.¹⁶⁴ Because of the slow growth of carcinoid tumors and the associated debility, it is recommended that resection of large liver metastases be done whenever feasible.

Often, repeated surgical intervention is required. Unfortunately multiple hepatic secondary lesions, coexistence of peritoneal carcinomatosis, or the presence of lymphatic involvement may limit results.¹⁶⁵ Examination of urinary 5-HIAA levels before and after operation will provide objective evidence of the degree of palliation.¹⁶⁶ Periodic 5-HIAA determinations will serve to determine recurrences.

Although administration of anesthesia to patients with carcinoid syndrome may be uneventful,¹⁶⁶ it can be complicated by an "acute carcinoid crisis."¹⁶⁷ This crisis is characterized by abrupt and refractory hypotension, bronchial constriction, or both.

Since bronchoconstriction is the most common complication of a carcinoid attack in the anesthetized patient, it is suggested that agents which may cause further bronchoconstriction such as thiopental and cyclopropane be avoided, and that a cuffed endotracheal tube be inserted at induction to permit effective positive pressure ventilation if needed,

Because it is the abruptness rather than the magnitude of the fall in blood pressure which may initiate the paroxysmal carcinoid attacks, those anesthetic agents with the great potential for hypotension should be avoided if possible. General anesthesia is preferred over spinal or epidural methods, since the resulting sympathetic blockade with the decrease in peripheral vascular resistance and lower cardiac output may render all resuscitative measures ineffective.

Treatment of the hypotension with vasopressors, although relatively ineffective, is indicated because of lack of more effective therapy. Norepinephrine and epinephrine are to be avoided because of their provocative effect. Fluid therapy is not without hazard since it may increase right heart failure. Furthermore, delayed excretion may result from the antidiuretic property of serotonin.³⁵ It is suggested that all patients be treated with antiserotonin compounds prior to surgery and that these agents be continued during and after surgery.¹⁶⁷

As a final note on the surgical management of carcinoid disease, it should be recalled that tumor manipulation has sometimes precipitated symptoms of the carcinoid syndrome,^{104,105,107} and thus undue handling of the tumor during the operation should be avoided. It has been suggested that preoperative irradiation may prevent this complication.¹⁶⁸

2. Medical therapy

Although the role of serotonin in the total pathophysiology of the carcinoid syndrome has been questioned, the fact remains that increased serotonin production is the hallmark of this disease. Medical treatment generally plays a palliative role and takes two approaches to minimize the symptoms. The first method is the use of *agents which reduce serotonin production*. The second is use of *serotonin antagonists*.

Inhibition of serotonin production may be accomplished by (1) reducing the available amount of precursor tryptophan, (2) inhibiting the hydroxylation of tryptophan to 5-HTP, and (3) preventing the decarboxylation of 5-HTP to serotonin.

Restriction of dietary tryptophan¹⁶⁷ can reduce the blood serotonin level and urinary 5-HIAA excretion, with subsequent reduction in the number of flushes, stools, and asthmatic-like attacks. Restriction of dietary tryptophan to less than 100 mg/day (normal daily requirement being 250 mg) may be effective for seven to ten-day periods. After ten days patients so treated often become sicker than before restriction, perhaps as a result of a decrease in niacin production. After three to four weeks of less than 100 mg of tryptophan per day, the patient usually returns to his previous clinical and biochemical state. Mengel¹⁶⁷ reported two patients who developed "pellagrinous" skin lesions during dietary restriction. Studies by Kabakow and others¹⁶⁹ also agree with the already mentioned short-term useful effect of a restrictive diet.

Recently para-chlorophenylalanine (PCP), a competitive inhibitor of tryptophan hydroxylase, was found to relieve the gastrointestinal symptoms in four of five patients with carcinoid syndrome and to reduce urinary 5-HIAA by 72-88%.¹⁷⁰ Dosages ranging from 1.0 to 4.0 gm per day were required. Flushing episodes were not significantly altered, a finding which supports the concept that serotonin may be involved more in the gastrointestinal symptoms than in flush production in the carcinoid syndrome. Side effects of PCP included tiredness, dizziness, anxiety, headache, and possible alteration in central nervous system function, with psychological effects varying from depression to hallucination.

Decarboxylation of 5-HTP to serotonin can be prevented by (1) inhibition of pyridoxine activity, since pyridoxine is a cofactor required by 5-HTP decarboxylase; and (2) inhibition of 5-HTP decarboxylase.¹⁶⁷

Pyridoxine deficiency can be induced by the administration of competitive inhibitors of pyridoxine activity, such as desoxypyridoxine and by agents which either bind pyridoxine or promote its excretion, such as isonicotinic acid hydrazide. Gailani and others¹⁷¹ reported that desoxypyridoxine in combination with a vitamin B₆-deficient diet

will lower platelet serotonin and urinary 5-HIAA levels, and produce symptomatic relief from the carcinoid syndrome up to three months after cessation of treatment. Desoxypyridoxine produced cutaneous and central nervous system side effects, and had to be discontinued by Gailani and co-workers because of dermatological, hematological, and gastrointestinal toxic effects.¹⁷¹ Other reports using vitamin B₆ antagonists with or without deficient diets have generally been ineffective.¹⁷²⁻¹⁷⁴ Isonicotinic acid hydrazide produced evidence of pyridoxine deficiency in only a small percentage of the patients.^{173,174} Generally, the methods used to inhibit pyridoxine activity rarely cause improvement and in fact often worsen the patient's overall clinical condition.

Alpha-methyl dihydroxyphenylalanine (DOPA) has been the most frequently employed agent designed to inhibit 5-HTP decarboxylase. Except for a few reports,^{175,176} use of alpha-methyl DOPA has had a poor clinical response. Side effects include extreme weakness, prostration, dizziness, inability to concentrate, and development of a pellagrinous tongue.¹⁷⁷ Alterations in serum serotonin and urinary 5-HIAA have been variable. It is suggested that alpha-methyl DOPA may be useful in 5-HTP secreting tumors.¹⁶⁷

Mengel,¹⁶⁷ in his excellent review of therapy in carcinoid disease, states that serotonin antagonists are currently the most effective drugs for the relief of carcinoid symptoms. Since they vary chemically and pharmacologically, they may be unpredictable with regard to control of flushing, diarrhea, and asthma. Patients often become refractory to these agents after several months, and it has been suggested that this problem may be modified by interrupting therapeutic courses for several days each month. Combinations of two or three agents may also increase effectiveness. Weakness, hypotension, syncope, lassitude, and "strange feelings" are the most common side effects of these drugs. Serotonin antagonists unfortunately do not decrease tumor size or alter either blood serotonin or urinary 5-HIAA. Dosage and route of administration

Table 2*
Serotonin Antagonists

Drug	Dosage
Methysergide maleate (Sansert Rx, VML-429)	6-24 mg/day p.o.; 1-4 mg single IV dose for acute attack; 10-20 mg in 100-200 ml saline, IV infusion over 1 to 2 hours.
Cyproheptadine† (Periactin)	6-40 mg/day p.o.; 50-75 mg in 100-200 ml of saline infused over 1-2 hours for acute attack.
KB-95	200-1000 mg/day p.o.; 200-500 mg in 100-200 ml of saline infused over 1 to 2 hours.

*After Mengel¹⁶⁷

†Cyproheptadine also exerts an antihistaminic action.

of three of the most commonly used antagonists are summarized in Table 2.

Mengel¹⁶⁷ recommends that the patient be observed carefully for at least a week prior to administration of the drug to note the pattern of his particular symptoms, so that medication may be given during periods of greatest symptoms. The scheduling of drug administration is more important than the total daily dose. Methysergide maleate (Sansert) in doses of 8-32 mg per day seems to be the most effective agent, and can be particularly useful in treatment of malabsorption and diarrhea.¹⁷⁸ Kahil and others¹²⁴ reported that intravenous cyproheptadine relieved the symptomatology of a "carcinoid crisis." Aramine failed to alter the blood pressure, and levarterenol not only failed to produce a pressor effect, but increased the severity of the symptoms.

Costello¹⁷⁹ found that combinations of 5-fluorotryptophan and 5-bromotryptophan reduced flushing, diarrhea, and urinary 5-HIAA in two of three patients. It is thought that these compounds may be incorporated into the carcinoid tumor and interfere with serotonin synthesis. Broom and associates¹⁸⁰ reported reduction of diarrhea by chlorpromazine in daily doses of 100 mg, but more generalized improvement with cyproheptadine. Ureles and others¹⁸¹ were also favorably impressed by the effect of chlorpromazine on diarrhea. Mengel,¹⁶⁷ however, has found little objective evidence of improvement in his patients with either phenothiazine derivatives, antihistamines, adrenocorticosteroids or reserpine. Occasional reports

of relief from flushing with steroids in patients with bronchial carcinoids have appeared.^{133,181}

An uncommon feature of carcinoid disease not previously discussed is the "abdominal crisis" or "pseudocrisis."¹⁸² It is characterized by an extremely tender and rigid abdomen, with normal bowel sounds and no signs of a paralytic ileus. Its etiology is not well understood. Such attacks may be initiated by extreme hyperperistalsis with or without diarrhea, and will respond to anticholinergics. Patients who suffer from intense cramping of the abdominal muscles are best treated with muscle relaxants. It is important that these abdominal "pseudo-crises" be differentiated from intestinal obstruction by tumor or adhesions.

3. Radiotherapy

Carcinoid tumors are generally resistant to irradiation; however, a few favorable responses have been reported.¹⁶⁷

4. Chemotherapy

Those employing nitrogen mustard, purine antagonists, and methotrexate have reported conflicting results. Side effects are severe, with minimal evidence of antitumor activity. Encouraging results with 5-fluorouracil (5-FU) have been reported,^{183,184} and hepatic artery infusion of 5-FU or other agents may prove to be the best available method. To date the most consistently effective agent has been cyclophosphamide (Cytosan). Effective tumor chemotherapy is usually associated with a decrease in liver size and rise in urinary 5-HIAA as well as exacerbation of symptoms. No doubt this represents destruction of tumor cells with release of the toxic metabolites.¹⁸⁵ Therefore, patients should be pretreated with serotonin antagonists for several days before beginning chemotherapy and so maintained throughout the course of treatment.

5. Supportive care¹⁶⁷

Palliative therapy must include general supportive treatment. Adequate caloric intake should be maintained with a diet of 70 grams of protein and a high fat content. Vitamin supplements, particularly niacin, should be given. Adequate hydration is im-

portant when diarrhea is a prominent symptom. Any foods and activities which seem to trigger or accentuate symptoms should be avoided. Should carcinoid heart disease develop late in the course, treatment should be directed to the particular cardiovascular abnormality with conventional medication.

Summary

The accumulation during the past decade of a considerable amount of new information concerning the pathophysiology of the carcinoid spectrum prompted this review. It can, perhaps, serve as a reference work to provide an overall perspective of the many aspects of carcinoid disease.

An historical resume and analysis of serotonin physiology, pharmacology, and metabo-

lism in man, and the carcinoid tumor, syndrome and spectrum are examined. The pathology of carcinoid tumors is reviewed and carcinoid tumors are examined in detail according to their site of origin. Clinical features of the carcinoid syndrome are analyzed, with special attention to the pathophysiology of specific symptom-complexes. A role for kinin peptides and other vasoactive substances is discussed. The variants of carcinoid disease are considered in relation to the carcinoid spectrum. The most frequent clinical manifestations of carcinoid disease are examined according to location of the primary tumor, followed by a discussion of useful laboratory diagnostic methods. Finally, the medical and surgical treatment of carcinoid disease are reviewed.

(References on request) — SEE BIBLIOGRAPHY FOLLOWING

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National Program for Dermatology

J. LAMAR CALLAWAY, M.D.

Late in the fall of 1967, at an informal luncheon meeting in Washington, D. C., Drs. Baer, Shelley, and Livingood, department chairmen, and Drs. Sessoms and Anderson, acting as representatives of the National Institutes of Health, brought forth the idea that the specialty of dermatology ought to take a good hard look at itself to see if it was indeed not possible to direct and control its destiny. Such an undertaking seemed feasible from the standpoint of both the government and of the specialty itself.

The initial idea continued to grow, and in December of 1967 Drs. Baer, Shelley, and Livingood met with the board of directors of the American Academy of Dermatology, which enthusiastically received and supported the proposal. The Academy promptly appointed an ad hoc Joint Committee on Planning for Dermatology under the chairmanship of Dr. Baer, and appropriated \$15,000 for the preliminary work. The American Dermatological Association promptly matched this amount. Subsequently the American Academy of Dermatology and the

American Dermatological Association added \$20,000, with sizable contributions from the Society for Investigative Dermatology and the Dermatology Foundation.

Since the NIH needed data quickly, the Academy ad hoc committee enlisted the services of many leading dermatologists throughout the country, and a detailed questionnaire on education manpower and practices was submitted to all of the 84 United States medical schools and other independent institutions having approved residency programs in dermatology. The results were summarized in a 350-page preliminary report, which included some rather significant information.

Although skin diseases are responsible for only 0.5% of deaths in this country, at least 5% of all people in this country have some type of skin disorder during a given year. Some 23,000 man years are lost each year from various skin conditions, and at least half of all cases of nontraumatic disability awarded Workmen's Compensation are due to dermatological disorders. In Southeast Asia disabling skin diseases rank second only to trauma in ambulatory service disease, producing 25% of the total disability cases.

From the Division of Dermatology, Department of Medicine, Duke University School of Medicine and Duke University Medical Center, Durham, N. C.

It has been estimated that skin disease in the United States costs about \$1.5 billion annually, including approximately \$1 billion for topical medication, \$150 million for hospitalization, \$100 million for physician services, and some \$5 million for nursing care.

There are approximately 3,600 dermatologists in this country, half of whom are board-certified. This is a ratio of one dermatologist for every 67,000 persons. The AMA Committee on Health and Manpower estimates that one dermatologist is needed for every 25,000 people. Thus we need at least 8,000 dermatologists, or more than twice the number now in practice. Dermatologists compose only 1.4% of all practicing physicians. This small percentage will find it difficult to cope with 5.6% of all outpatient problems and 3% of all hospitalized patients who have documented dermatological disease.

From the replies to the questionnaire, it was determined that only one half of our medical schools have a full-time dermatology faculty; 16% do not have a full professor of dermatology. Many medical schools have no funds for direct support of a teaching program in dermatology.

At present there is a rapidly increasing amount of basic science and therapeutic information which must be learned in order to meet the health needs of the country. It has been estimated that half of the scientific papers written to date have been published in the last 20 years, and that 75% of drugs now in use were unknown ten years ago.

As in all specialties, there is a maldistribution of dermatological care, with deficiencies in certain geographic areas, and paramedical personnel training lags far behind the training of dermatologists.

Another important factor is a more sophisticated and enlightened citizenry, which demands more service and information than was formerly available.

The need for continuing medical education for the dermatologist and other physicians may be alleviated by the recently authorized Regional Medical Programs.

In December of 1968 Dr. Baer and his ad hoc planning committee reported to the

American Academy of Dermatology. Again their proposals were enthusiastically received, and an additional \$85,000 was appropriated to meet the needs of the program.

The permanent Committee for the National Program for Dermatology, to be known as the National Council, will be composed of representatives of the American Academy of Dermatology (including professors of dermatology); American Dermatological Association; Society for Investigative Dermatology; American Medical Association; Department of Health, Education, and Welfare; Department of Defense; and the public.

A full-time executive secretary will be employed to help implement the committee's actions.

In addition, a service agency, the National Center for Dermatology, has been approved by the American Academy of Dermatology. The function of the center will be to consider new opportunities in dermatology and to help coordinate the many diversified departmental and individual efforts in our specialty.

In January, 1969 the Joint Committee on Planning for Dermatology took the first steps toward implementing the National Program for Dermatology. Priorities were considered on the basis of several factors, including (1) the urgency of the problem, (2) fundamental nature of the need, and (3) opportunity, judged by availability of talent, resources, and so forth.

Using these criteria, it was possible to establish categories for implementation under the following headings: (1) administration, (2) patient service, (3) education, and (4) research.

Even these important categories must have established priorities. For example, priority one requires an immediate task force. Priority two indicates a high priority, but since no actual funds have been identified, a task force is appointed to investigate these categories. Priority three applies to those subjects in which a feasibility study is indicated and a task force is necessary to investigate further. Priority four covers those phases not now under consideration.

A coordinating center for dermatology

will be established for data collection from university centers and industrial facilities. More specific cooperative studies on specific data collection will be undertaken to evaluate (1) therapeutic drug studies, (2) adverse drug reactions, (3) uniform patient charting, (4) a registry for rare dermatoses. In addition, reference laboratories, training and educational administration, and a national health survey became important functions of the central administrative office.

Patient Service

Subjects to be studied in the area of patient service considered worthy of implementation are:

1. Units for patient care
 - a. Maximum hospital care
 - b. Minimal care for ambulatory inpatients
 - c. Outpatient care.
2. Mobile units with full diagnostic and treatment facilities

Although limited to some 3,000 practicing dermatologists with no immediate prospect of creating an adequate supply, we must prepare ourselves to deliver more effective and more extensive dermatological care for 200 billion Americans.

Ancillary and paramedical personnel will be needed to care for many routine skin problems under the direction of a dermatologist.

Diagnostic centers for specialized dermatological testing, for consultation, and for intensive care must be made available where local specialists are lacking. Such pilots will be set up to provide a spectrum of services utilizing the regional medical centers, large community hospitals, and university medical centers.

Some pilot units must be mobile. They will include diagnostic laboratories with facilities and materials for performing special tests and patch tests for common and industrial allergens, and facilities for culturing and identifying microbiological organisms; and they must have available all therapeutic modalities.

Inpatient facilities will be available for short-term intensive care. Rehabilitation cen-

ters, already under development, will offer long-term care as well as physical therapy and rehabilitation.

In patient service, *education* remains the key word. Instruction in home care, in prophylactic dermatology; instruction of lay aides, nursing personnel, physician assistants, and of the patient himself—this is essential.

The availability of a consultation service for the practicing family physician, adequate instruction for proper therapy, patient cooperation, and availability of proper facilities will produce better patient service.

Education

All proposals in this category have a priority one rating. They will be implemented in an individual "package" through selective institutions under the direction of specific individuals. It is quite clear that the total education program must have prime priority. The following sequence has been suggested for implementation: (1) self-evaluation; (2) the dermatologist as the educator; (3) core curriculum development; (4) learning resources; (5) biomedical communication systems; (6) teaching methodology.

Educational goals cannot be met without a reorganized and well coordinated program. Increased attention to the total problem of education is urgent because of the following circumstances:

1. There is a shortage of teachers of dermatology in the medical schools of our country.
2. Full-time faculties in dermatology have lagged behind the growth of faculties in other specialties.
3. Salary support for dermatology faculties is lacking.

The recommendations of the Joint Committee on Planning for Dermatology to improve education in this field are based on the following premises:

1. Better education is needed for the public, medical students, house officers, faculty, research professionals, non-dermatologist physicians, and paramedical and ancillary personnel.
2. These goals are best determined by

the specialty of dermatology itself, in conjunction with expert advice by educators, professionals, and members of other medical disciplines.

3. The educational programs must be constantly improved, and accurate methods of evaluating the effectiveness of these programs will have to be devised.

4. Regional, local, and individual physician-learner programs will be given prime consideration for the dissemination of educational materials.

5. Funds to carry out these far-reaching proposals will have to come from a number of sources, including dermatological organizations, foundations, industry, and government.

In summary, educational needs in dermatology cover a broad range of potential recipients, including the public, medical students, interns, residents, faculty members, researchers, practicing dermatologists, other practicing physicians, and paramedical personnel. To meet these needs would require the following:

1. Identification of the special educational requirements of each group.

2. Development of an education program to fit the specific need of individuals in each group.

3. The use of modern audiovisual devices for the best possible presentation of the education program.

4. Evaluation of the effectiveness of the programs.

5. Research testing and the development of new approaches in education and communication, to take advantage of the best method of learning.

Research

The highest priority will be given to research in those dermatological disorders which are most prevalent, yet at the same time are relevant to a targeted approach.

Several dermatological disabilities are peculiar to today's environment. We must be thoroughly aware of the vulnerability of the skin to (1) chemical carcinogens and irradiation, (2) industrial hazards, and (3)

extreme environmental conditions such as may be encountered by the military in the polar regions on one hand and in the tropics on the other.

Research efforts in the recent past have yielded an immense fund of new knowledge and opened vast new areas for exploration and research. Particular attention has been given to selecting a systems analysis technique with a logical base adaptable to research planning. The convergence technique developed by Carrese and Baker seems best suited to disease-oriented and possibly discipline-oriented research. Major problems which satisfy criteria of breadth, relevance, and exploitability have been selected for a national program of research, but it should be emphasized that these subjects constitute only a partial list of important dermatological problems.

The following subjects have been selected initially for detailed research planning projection: (1) eczematous dermatoses, (2) disorders of cutaneous appendages (only acne was chosen for complete chart analysis by the convergence technique), (3) psoriasis, (4) diseases involving the melanocyte and melanin synthesis, (photobiological skin problems, (6) integumental bioengineering, (7) connective tissue research, (8) burns.

These subjects represent important problem areas, but in addition, research in these conditions will serve as models by which to plan research in such diseases as skin cancer, diseases of epidermal proliferation and keratinization, infections, genetic disease and malformation, and insect-bourne diseases.

Conclusion

From this original effort, it is quite clear that deramtolgy is taking a long, hard, critical look at itself, its achievements, its deficiencies, and its potential for total service.

Acknowledgement

Much of the material presented in this paper has been drawn from the Preliminary Report of the Joint Committee on Planning for Dermatology of the American Academy of Dermatology and from Medical World News.

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NOVEMBER, 1969

THE FALL COMMITTEE AND COMMISSION REPORTS

No better illustration of G. Northcote Parkinson's first law could have been found than the second sitting of the divided Fall Executive Council meeting. The former one-day meeting had been divided by President Beddingfield, upon previous direction of the Council, to assure full discussion of all matters and still make the sessions of reasonable length. The second one ran from 9:30 A.M. until 7:00 P.M., showing how work expands to fill the time allotted for its completion. The main reason, of course, is the great increase in Society responsibilities.

Among the recommendations of the Planning Committee was one declaring that the Commissioners should be voting members of the Executive Council. These hard-working men, as most of our members know, oversee the work of groups of committees which have common responsibilities. Through their work with large numbers of committee members they gain considerable insight into the sentiment of the membership and their counsel is valuable as they join the discussions of the Council, but their inability to make motions or vote on them limits their usefulness. The original intent of depriving them of the vote was to assure the membership that no president could "stack" the Executive Council with his appointees, which include the Commissioners; numerically this would be very unlikely. These recommendations, of course, are for action by the House of Delegates, which will vote on them in May.

The Planning Committee also took note of the problems which have existed in some states about protecting the right of physicians to due process of law in their dealings with hospital boards of trustees. Such rights need to be assured in the by-laws of hospitals, to judge by legal actions elsewhere, and efforts will be made to see that this is called to the attention of hospitals and physicians in this state.

In a number of actions by various committees matters arose in which the concept of usual and customary fees was involved. The Society is on record in favor of this position, and the Executive Council reaffirmed it in dealing with reports concerning such agencies as the Industrial Commission and Vocational Rehabilitation.

The Society shares with hospitals concern over the release of patients' records to insurance companies without knowledge of the physician. The proper committees are exercising their influence on this matter. Utilization review procedures for nursing homes will require development of new procedures under the guidance of our Utilization Review Committee.

Plans for the Annual Meeting (May 16

through May 20, 1970 at Pinehurst) are developing in a very satisfactory way, with especial enthusiasm on the part of the exhibits and audiovisual committees over the response last year and the possibilities this year. There are many subjects pressing for attention, and there will probably be discussion of health care delivery plus a number of other topics on which the public looks to the profession for leadership. Awards will be changed somewhat this year, with two new prizes established. One sum of \$200 will be given for the best scientific exhibit by a physician, the other a \$200 award for the best scientific exhibit by a medical student. The Orthopedic Award of \$200 for the best student paper in orthopedics remains current, as do the traditional awards of the Society.

The Council, acting on recommendation of the Medical Education Committee, endorsed the Duke plan to work with national groups to establish standards for physician's assistants. Also endorsed were the programs at Bowman Gray for training of pediatric and neurology assistants.

The Cancer Committee is considering the study of cancer deaths by establishing a program similar to the ones supported by the Society in the fields of maternal mortality and anesthesia deaths. Because the number of cancer deaths is so much greater than mortality associated with pregnancy and anesthesia, and because there are fundamental differences among these groups of conditions, the proposal will receive further study before the Council acts on it. The same committee has been notified that the state cytology laboratory will not do private office work after January, 1971; details will be sent to all physicians in the state shortly.

The Committee Advisory to the State Board of Motor Vehicles is concerned over the problem of obtaining blood samples for alcohol determination on unconscious or dead accident victims, and is working to establish proper procedures. The changes of medical interest in the motor vehicles act arising from the 1969 legislature will be the subject of a JOURNAL article.

The House of Delegates will be called upon

to act on a recommendation for a major change in student membership in the Society. Essentially, medical students in this state's schools would be eligible from all classes, and would be able to vote and hold office. At present only juniors and seniors are eligible, and they cannot vote or hold office. After certification of their student status by medical school authorities and payment of \$3, a student would have his application reviewed at headquarters. For every 25 members at a school one vote would be granted in the House of Delegates. Mr. Lloyd, senior student at Duke, was present for almost the entire session of the Council, and gave his opinion that students would welcome an opportunity for first-class citizenship in the Society, and in the course of the day indicated ways in which students would participate in Society affairs. In his opinion there would be no great rush by students to join, and those who did would be interested, responsible people for the most part. He said there is as much apathy among students concerning medicine's general professional responsibilities as he senses among the practitioners.

An ad hoc committee dealing with suggested tenure of office for various Society positions will make a number of recommendations to the House of Delegates which will assure a proper influx of people with new ideas and avoid wearing out the stalwarts who labor for years on behalf of the profession.

Providing the bids come in at acceptable levels, there will be a ground-breaking ceremony in Raleigh on November 12 for the new headquarters building. At this writing the houses on the property are coming down and the wine bottles and beer cans which the Governor can look out his window and bemoan are being carried off under the doleful eye of the gubernatorial basset hound. Also under a doleful eye is the Society budget, but Dr. Wayne Benton was able to report that the year will end with us narrowly in the black, which is as it should be.

The Child Health Committee and the Executive Council endorsed the tuberculosis, venereal disease, and immunization pro-

grams of the State Board of Health. Also approved was the statewide extension of their multiphasic health screening program, carried out in a given county only after the profession requests it and works with the Board through an advisory council in establishing it; five counties currently participate. The Maternal Health Committee gave it as their opinion that the prescribing of birth control pills does not require written consent from the patient. The physician must be up to date on knowledge of the indications and contraindications for the drugs, and have taken proper steps to insure reasonable safety for a specific individual. By recommendation of the Committee on Marriage Counselling, the Council reaffirmed the position on sex education in the schools passed by the House of Delegates in May.

In the deliberations of the committees comprising the Commission on Developing Government Health Programs, there was the recurrent observation that medicine must take every possible means to assure proper representation of providers of health care in the organizations arising from the new federal emphasis on local direction of health care programs. In many instances few or even no physicians serve, and it seems unlikely that the deliberations of such bodies would be realistic without them. It is planned that the Society will approach the organizers of these groups about our views, and include in our efforts representations to our Congressional delegation. Proposals will be brought to the Society before too long concerning ways in which the profession can offer leadership in the medical aspects of the Appalachia program, which is flourishing in the Morganton area under a full-time physician who has joined our Society. So far the Coastal Plains Planning Development has not included work in the health field, but this group has been told of our interest should they think of entering the field.

Although the Eye Care Committee considers blindness a medical problem, the State Commission for the Blind consists of three physicians and three optometrists; efforts will be made to bring our views on the mat-

ter to the proper parties. The Medicolegal Committee is working on forms to implement organ donations for transplantation, and an ad hoc committee will be appointed to help in implementing the Uniform Anatomical Gifts Act passed by the legislature. Inquiries have already been received from the public concerning donations of organs and bodies.

* * *

SAVED BY A LONG SPEECH

In the September 29, 1969 *JAMA* Dr. William Foley writes of the little known assassination attempt made on Theodore Roosevelt in the last days of his 1912 Bull Moose Campaign. Although at times assassination attempts have almost as much influence on events as successful assassinations, they seem to have little historical impact. In the Teddy Roosevelt incident, the assassin, John Schrank, was apparently psychotic, and held the ex-President responsible for McKinley's assassination. After trailing Roosevelt around the county, Shrank finally caught up with him in Milwaukee, as he left his hotel to go to an auditorium where he was to address the local Bull Moose organization. From only 7 feet away, Schrank fired his .38 caliber pistol, deflected at the last moment by a man standing next to him in the crowd. Roosevelt did not think he had been hit, and drove on to the auditorium; en route he found that he was bleeding. As one might expect, Teddy plunged on with the speech, showing the audience his bloody shirt and saying that, under the circumstances, he couldn't give a long talk. Yet he went on for 50 minutes, while his doctor and his staff grew more agitated.

Foley's account goes into considerable detail over the subsequent confusion concerning who was in charge of Roosevelt's treatment; it is a story associated with virtually all illnesses and wounds of famous people; yet its lesson seems never to be learned. In any event, the bullet came to rest in Roosevelt's chest wall without penetrating the pleura, and he took the projectile with him to his grave. The reasons he was not seriously injured from such a close-range shot were, first, the bystander's deflection of the shot,

which was aimed at his head; and, second, the contents of his coat pocket, which held a steel spectacle case and a folded 50-page manuscript. The bullet had to pass through both, and was so slowed that there was neither bony injury nor pleural penetration.

If Teddy Roosevelt had had the brevity of Adlai Stevenson, or the horde of aides of modern politicians who would not allow their boss to carry his own speech, he might not have survived his Milwaukee visit. But he would have been spared the election loss, and who knows what eventually cost him the most misery.

Physicians Go "Back to School"

with Wyeth's Programmed Learning

Physicians from around the nation, gathering in Philadelphia for the annual meeting of the American Academy of General Practice, found a challenging opportunity to test and strengthen their medical knowledge in key clinical areas. The opportunity came in the form of 100 programmed learning machines, open free to the physicians throughout their meeting, September 29—October 2, at Philadelphia's Civic Center.

Sponsored by Wyeth Laboratories, Radnor, Pa., pharmaceutical manufacturer, the educational programs offered the GP's a chance to brush up on the following areas: treatment of thyroid disorders, diabetes control, liver function tests, and dermatology.

In addition, a new Wyeth program dealing with Office Gynecology was premiered at the AAGP meeting.

Jack Rothstein, manager of medical promotion at Wyeth, has made the programmed learning machines available at the Academy meeting in recognition of the heavy educational demands placed on member physicians. The programs are actual courses, and the AAGP gives one hour of postgraduate study credit for time the physician spends taking each of these programmed courses."

Mr. Rothstein also said Wyeth is making the five programs available upon request to state chapters of the Academy for their annual meetings.

Bulletin Board

The promotion of William N. Hilliard of Raleigh to the position of Executive Director of the Medical Society of the State of North Carolina, and the appointment of James T. Barnes of Raleigh to the newly created position of Executive Vice President has been

announced by the Society's President, Dr. Edgar T. Beddingfield, Jr., of Wilson.

Hilliard, formerly Assistant Executive Director, has been employed by the Society since 1952, and prior to that was a member of the WPTF Radio Station news staff for six years. As Executive Director, he will be the chief executive officer and will be responsible for the headquarters office operations of the State Medical Society and its programs. A native of Warren County, he spent most of his early life in Cary, and is a 1948 graduate of the University of North Carolina.

Barnes, who had been Executive Director of the State Medical Society since 1947, will carry out special assignments at a high policy level and will report directly to the Executive Council of the Society. A native of Wilson County, where he was county Director of Public Welfare from 1923 to 1936, Barnes is also a UNC graduate. Prior to his affiliation with the Medical Society, he served in state government positions with the State Board of Public Welfare, State Board of Health, and as Director of Vocational-Physical Rehabilitation.

Other new position designations for Society personnel were announced, including the naming of Garland Pace, controller; Mrs. LaRue King, office manager; Bryant Paris, administrative assistant; and Dan Mainier, field representative, all being Raleigh area residents.

In making the announcement, Dr. Beddingfield stated: "It is our belief that these changes in our headquarters operations will enable us to become even more effective as a public service organization whose principal mission is the provision of more and better health care for the people of this state."

NEW MEMBERS OF THE STATE SOCIETY

Carter Snow Bagley, MD, OALR, 411 Doctors Bldg., Asheville, N. C. 28801.

James Angus Turner, MD, OR, 283 Biltmore Ave., Asheville, N. C. 28801.

Abner Bushnell Preacher, Jr., MD, GP, MOQ 3177 Camp Lejeune, N. C. 28542.

David Howard Young, MD, GP, MOQ 3155, Camp Lejeune, N. C. 28542.

Neil Robert Newberg, MD, MOQ 3407, Camp Lejeune, N. C. 28542.

Travis Bedsole Goodloe, MD, MOQ 3236, Camp Lejeune, N. C. 28542.

Howard Binning Norton, MD, Route 1, Horse Shoe, N. C. 28742, (Renewal)

James Hampton Black, MD, 1351 Durwood Dr., Charlotte, N. C. 28204.

Lawrence Crumpler Walker, Jr., MD, OBG, 2850 St. Claire Rd., Winston-Salem, N. C.

Walter Scott Bowie, MD, OBG, 601 Walter Reed Dr., Greensboro, N. C. 27403.

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50 - 59	87.50	200.50	240.00
60 - 64*	137.50	307.50	347.00

PLAN B—\$300 DEDUCTIBLE

Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 24.00	\$ 54.50	\$ 72.00
40 - 49	36.50	84.50	102.00
50 - 59	57.00	122.00	139.50
60 - 64*	86.50	193.00	210.50

PLAN C—\$500 DEDUCTIBLE

Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 15.00	\$ 33.00	\$ 44.00
40 - 49	24.50	57.00	67.50
50 - 59	39.50	87.50	98.00
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Indication—Oral contraception.

Contraindications—Thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia, undiagnosed abnormal genital bleeding.

Warnings—Watch for the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism, retinal thrombosis); if present or suspected discontinue the drug immediately.

British studies reported in April 1968^{1,2} estimate there is a seven- to tenfold increase in mortality and morbidity due to thromboembolic diseases in women taking oral contraceptives. In these controlled retrospective studies, involving 36 reported deaths and 58 hospitalizations due to "idiopathic" thromboembolism, statistical evaluation indicated that the differences observed between users and non-users were highly significant. The conclusions reached in the studies are summarized in the table below:

Comparison of Mortality and Hospitalization Rates Due to Thromboembolic Disease in Users and Non-Users of Oral Contraceptives in Britain.

Category	Mortality Rates		Hospitalization Rates (Morbidity)
	Age 20-34	Age 35-44	Age 20-44
Users of Oral Contraceptives	1.5/100,000	3.9/100,000	47/100,000
Non-Users	0.2/100,000	0.5/100,000	5/100,000

No comparable studies are yet available in the United States. The British data, especially as they indicate the magnitude of the increased risk to the individual patient, cannot be applied directly to women in other countries in which the incidences of spontaneously occurring thromboembolic disease may differ.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or sudden onset of proptosis, diplopia or migraine. Withdraw medication if papilledema or retinal vascular lesions are found.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that pregnancy be ruled out for any patient who has missed two consecutive periods before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the first missed period.

A small fraction of the hormone agents in oral contra-

ceptives has been identified in the milk of mothers receiving these drugs. The long-range effect on the nursing infant cannot be determined at this time.

Precautions—Pretreatment physical examination should include special reference to the breasts and pelvic organs, and a Papanicolaou smear.

Endocrine and possibly liver function tests may be affected by Ovulen. Therefore, it is recommended that such tests if abnormal be repeated after the drug has been withdrawn for two months.

Pre-existing uterine fibromyomas may increase in size under the influence of progestogen-estrogen preparations.

Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation.

In breakthrough bleeding, and all irregular vaginal bleeding, consider nonfunctional causes. Adequate diagnostic measures are indicated in undiagnosed vaginal bleeding.

Carefully observe patients with a history of psychic depression and discontinue the drug if severe depression recurs.

Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study.

A decrease in glucose tolerance has occurred in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be observed carefully while receiving Ovulen.

Because of the effects of estrogens on epiphyseal closure Ovulen should be used judiciously in young patients in whom bone growth is not complete.

The age of the patient constitutes no absolute limiting factor, although Ovulen therapy may mask the onset of the climacteric.

The pathologist should be informed of Ovulen therapy when relevant specimens are submitted.

Adverse Reactions—A statistically significant association has been shown between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: cerebrovascular accidents, neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement, secretion), change in weight, changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, allergic rash, rise in blood pressure in susceptible individuals, mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme and nodosum, hemorrhagic eruption, itching. The following laboratory results may be altered by oral contraceptives: hepatic function: increased sulfobromophthalein and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T³ uptake values; metyrapone test; pregnandiol determination.

References: 1. Inman, W. H. W., and Vessey, M. P.: Brit. Med. J. 2:193-199 (April 27) 1968. 2. Vessey, M. P., and Doll, R.: Brit. Med. J. 2:199-205 (April 27) 1968.

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Kelly Keith, MD, S, Town Center, Box 1220, Southern Pines, N. C. 28387.

John H. Felts, MD, Bowman Gray, Winston-Salem, N. C. 27103, (Renewal).

Donald Eugene Harris, GP, E-7 Colony Apts., Chapel Hill, N. C. 27514.

Charles Bessellieu Hammond, MD, ObG, 3521 Mossdale Ave., Durham, N. C. 27707.

Robert Sill Byron, MD, P, 21 Forest View Dr., Asheville, N. C. 28804.

Edward McGowan Hedgpeth, Jr., MD, OPH, 2429 Perkins Rd., Durham, N. C. 27706.

Tollie Boyce Cole, MD, ALR, 223 Pineview Rd., Durham, N. C. 27707.

Paul Neff Erckman, MD, PD, 5 Medical Pavilion, Greenville, N. C. 27834.

Donald Torian Moore, MD, ObG, 1007 Akron Ave., Durham, N. C. 27703.

Frank Palmer Dalton, MD, C, Croasdaile Clinic, Durham, N. C. 27705.

Robert Mason Wilkins, MD, GE, 5 Lucerne Lane, Durham, N. C. 27707.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY

Dr. Eugene R. Teise and Dr. Nancy O'Neil Whitley have joined the faculty of the Bowman Gray School of Medicine. Dr. Heise is an assistant professor of microbiology and an associate in surgery, and Dr. Whitley is an instructor in radiology.

Dr. Heise will have the responsibility for developing and directing a tissue-typing laboratory and for conducting research in transplantation immunology. He also will participate in the teaching programs of the departments of surgery and microbiology.

A graduate of Wittenberg College, he holds the M.S. degree from the University of Iowa and the Ph.D. degree from Wake Forest University. He recently completed three years of postdoctoral training in immunology at the University of Washington School of Medicine.

Dr. Whitley, who recently completed residency training in radiology at North Carolina Baptist Hospital, will be engaged principally in diagnostic radiology.

She attended Duke University and received the M.D. degree from the Bowman Gray School of Medicine. She is married to Dr. Joseph E. Whitley, professor of radiology at Bowman Gray.

* * *

Dr. Edward D. Bird, associate professor of medicine, has been appointed director of the medical school's Clinical Research Unit. He succeeds Dr. Richard L. Burt, professor and chairman of the Department of Obstetrics and Gynecology, who gave up the position to devote more time to the

teaching, research, patient care, and administrative responsibilities in his department.

The six-bed unit has served 167 patients in its 15 months of operation. It is designed to permit physicians and medical scientists to concentrate their skills on the study and treatment of a relatively small number of patients with a wide range of diseases and disabilities.

* * *

Thirty medical students have completed three months of participation in medical research which eventually could pay dividends in the advancement of medical treatment.

The students were working through the medical school's Student Summer Research Fellowship Program. They investigated such areas as corneal transplants, means of making radiation more effective in the treatment of cancer, the family-planning behavior of poverty-level Negroes, use of computer techniques in the study of coronary histories to determine possible reaction to treatment, effects of oral contraceptives, and the chemotherapy of breast cancer.

Research discovery is not the primary purpose of the summer research program. Dr. Hugh B. Lofland, Jr., professor of pathology and chairman of the fellowship program, said that the research experience gained by the student is more important than the project itself.

"The work is a valuable exercise in the collection of data by sound observation, analysis of information obtained, and the development of conclusions," he said. "These are much the same steps they will take in solving problems when they become physicians."

* * *

A training program designed to prepare scientists for careers of research in atherosclerosis, the leading cause of heart disease, has been established at the Bowman Gray School of Medicine.

The program, developed by both the departments of pathology and laboratory animal medicine, offers postdoctoral training in all aspects of atherosclerosis for holders of M.D., Ph.D., or D.V.M. degrees. A course of study leading to the Ph.D. degree in comparative and experimental pathology also is offered.

The program will be supported for a five-year period by a \$300,000 grant from the National Institutes of Health. More than half of the funds will be used to provide stipends to trainees.

Dr. Hugh B. Lofland, Jr., professor of pathology and director of the training program, said, "It is obvious that an immense amount of research is needed if the atherosclerosis problem is to be alleviated. This training program is based on the belief that the rate at which research in atherosclerosis yields useful information would be enhanced by bringing to bear the talents and skills of capable young scientists who are trained specifically for this field."

Dr. Thomas B. Clarkson, Jr., professor and director of the Department of Laboratory Animal Medicine, and Dr. Robert W. Prichard, professor of pathology, are associate directors of the program. They, along with Lofland, are original members of the Bowman Gray atherosclerosis research group which has been studying the disease for the past 12 years. Each has gained an international reputation for his research contributions on atherosclerosis.

* * *

George C. Lynch, director of the Department of Audio-Visual Resources, received the Ralph Sweet Award for the best illustration presented at the 24th annual meeting of the Association of Medical Illustrators Sept. 14-17 in Washington, D. C.

The award, regarded as the top honor in the members' exhibit, is presented annually in memory of the illustrator who formerly directed the School of Medical Illustration of the University of California, San Francisco.

Lynch won the award for two illustrations which he had on exhibit. One was a color drawing on eye surgery, "Removal of Lens in Presence of Filtering Bleb," which he had prepared for Dr. R. Winston Roberts, professor of ophthalmology, and a surgical drawing on "Supraglottic Laryngectomy" for Dr. Walter A. Ward, assistant professor of otolaryngology.

* * *

Dr. Thomas B. Clarkson, Jr., professor and director of the Department of Laboratory Animal Medicine, served as co-chairman of The Working Conference on the Feeding and Nutrition of Nonhuman Primates held recently in Washington, D. C. He presented a paper on "Diseases Affecting the Usefulness of Nonhuman Primates in Nutrition Research."

* * *

Dr. Carolyn C. Huntley, professor of pediatrics, recently presented a paper on "Dysgammaglobulinemia and Rubella" at the third International Conference on Congenital Malformations in The Hague, Netherlands.

* * *

Dr. Richard Janeway, assistant professor of neurology and acting chairman of the Department of Neurology, presented two papers at the World Congresses of Neurological Sciences held Sept. 20-27 in New York.

His papers were on "Effects of Forelimb Exercise on Cephalic Blood Flow" and "Radioisotope Arteriography: Clinical Use of Gamma Camera in the Diagnosis and Treatment of Patients With Cerebrovascular Disease."

* * *

Dr. Edward M. Lieberman, assistant professor of physiology, participated in the third International Biophysics Congress in Boston, Mass. He presented a paper on "The Structural and Functional Sites of Action of Ultraviolet Radiation in Crab Nerve Fibers."

Four faculty members presented a refresher course on "Radiology, Including Nuclear Medicine, in Neurovascular Diagnosis" at the recent meeting of the American Roentgen Ray Society in Washington, D. C.

* * *

Dr. Arthur Wainer, associate professor of biochemistry, presented a paper on "The Preparation of the Mercaptoethanol Mixed Disulfide Derivatives of the A and B Chains of Bovine Insulin" at an American Chemical Society meeting in New York.

* * *

Dr. David L. Kelly Jr., assistant professor of neurosurgery, was appointed assistant chairman of the Membership Committee and co-chairman of the Residents Committee of the Congress of Neurological Surgery during its recent meeting in Boston.

* * *

Dr. Yi-Chi Chang, instructor in pharmacology, presented a paper on the "Effects of Non-Steroidal Anti-Inflammatory Agents on Rat Liver Sulfhydryl Content" at the fall meeting of the American Society for Pharmacology and Experimental Therapeutics in Pittsburgh, Pa.

* * *

Dr. Noel D. M. Lechner, assistant professor of laboratory animal medicine, recently presented a paper on "Atherosclerosis in Some Species of New World Monkeys" at the second Conference on Experimental Medicine and Surgery in Primates at the New York University Medical Center.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

The appointments of new full-time faculty members for the Health Sciences Division of the University of North Carolina were announced by Chancellor J. Carlyle Sitterson following approval by President William C. Friday and the Board of Trustees.

James Herbert McLeran received joint appointments as professor and chairman of the Department of Oral Surgery in the School of Dentistry. McLeran was graduated from Simpson College and won his D.D.S. and M.S. from the University of Iowa where he served as associate professor since 1967. He is a native of Audubon, Iowa.

The new professors of Speech and Hearing Sciences, Division of Health Sciences, is Robert Peters. Peters has also been appointed director of the Institute of Speech and Hearing Sciences and professor of English. Since 1955 he has held the position of professor and chairman of the Speech and Hearing Sciences Department at the University of Southern Mississippi. A graduate of the University of Minnesota, he received his M.A. and Ph.D. from Ohio State University.

James W. Anderson received joint appointments as instructor in Hospital Administration and direc-

tor of the Private Patient Service at North Carolina Memorial Hospital. He has been assistant administrator to the director of financial operations at Duke University Medical Center since 1967. Born in Rougemont, he is a graduate of the University of Miami, Fla.

The new assistant director of the Publications Service for Continuing Education, Health Sciences, is E. Shepley Nourse. A San Francisco native, Miss Nourse has been associated with Stanford University Press, Science Research Association, Association of American Medical Colleges, and Duke University Library and Information Science Publication Project. She is a graduate of Stanford, receiving her M.B.A. from the University of Chicago.

The School of Dentistry has a new associate professor. He is Jacob S. Hanker former assistant in surgery at Johns Hopkins University School of Medicine. He is a graduate of St. Joseph's College in Philadelphia, Pa., his hometown. His Ph.D. was earned at the University of Maryland.

A Detroit, Mich. native, Michael Joseph Symons will become an assistant professor on the Public Health faculty. After graduation from Bowling Green State University, he received his M.P.H. from the University of Michigan where he has been working on his Ph.D.

Former assistant professor at Toronto General Hospital, George Douglas Blenkarn will join the School of Medicine as an assistant professor. The Toronto native won his M.D. from the University of Toronto.

Ralph Spencer has been named visiting assistant professor in the School of Medicine. A native of England, he received his three degrees from Manchester University. He has been a professor at Liverpool University since 1958 and is a fellow of the Royal College of Surgeons.

* * *

"Every school is teaching something about sexuality simply because its students are boys and girls. What we have to decide is whether we want to pass on good or bad sex education."

These remarks were part of a speech delivered by Ethel M. Nash, associate professor of obstetrics and gynecology at the University of North Carolina School of Medicine and faculty member of the Carolina Population Center, to the Second Symposium on Medicine and Religion which was held recently.

Mrs. Nash, who is also a marriage counselor with Psychiatric Associates of Chapel Hill and a past member of the board of directors of SIECUS, outlined some of the goals and limitations of sex education.

"Sex education should be given at the age when children are able and ready to receive it. It should be presented in a manner which enables the comfortable acceptance of sexuality along with a behavior code which does not allow exploitation of another."

"A basic goal is the recognition of the fact that sexuality and spirituality are not in conflict and the enabling of professionals in many fields to help their patients, councilors, and church members deal with sexual difficulties."

Mrs. Nash pointed out that sex education cannot "eradicate sexual problems, substitute for individual counsel, or resolve conscious and/or unconscious sexual conflicts."

"What it can do," she said, "is provide basic information and dialogue between adults and students on more than a bull session basis. It can identify facts and fallacies and clarify issues and values."

* * *

President William Friday recently took part in a Washington, D. C. conference on management of health services as these affect universities and medical colleges in relation to federal funds.

The American Association of Universities directors met with representatives of the Association of American Medical Colleges at the AAU offices, 1785 Massachusetts Avenue, N.W. Dr. Friday is president-elect of the Association of American Universities. Dr. Nathan Pusey who is president of Harvard University is president of the AAU.

* * *

Dr. Marshall Hall Edgell, University of North Carolina bacteriologist, has received a \$12,000 National Science Foundation grant.

Dr. Edgell's research involves a bacteriophage—a virus which kills bacteria by multiplying inside of the bacteria until they burst.

The project, which will study the structure of bacteriophage PHI x 174, is part of a larger three-year program funded by the National Institutes of Health.

In the three-year program, Dr. Edgell and Dr. Clyde Hutchison hope to come to understand better the basic biological question of the relationship between structure and function, by using this virus as a model because of its simplicity.

* * *

The new \$4.5 million Dental Education Building on the University of North Carolina campus was dedicated Oct. 19.

The new five-story building is twice the size of the original dental building completed in 1952 at a cost of \$1 million.

Two years ago the UNC Dental Research Center was completed at a cost of \$1.3 million.

All three buildings bring the total cost of the dental complex on the University campus to \$6.8 million.

Expansion of the Dental School facilities will allow an increase in the number of dental students from 50 to 75 in 1971, an increase in dental hygiene students from 15 to 30 each year, and an increase of dental assistant students from 25 to 40.

* * *

Dr. Colin G. Thomas, Jr., chairman of the De-

partment of Surgery at the University of North Carolina, addressed an international society of surgeons meeting in Argentina. He discussed the comparative merits of two different surgical procedures to relieve benign obstructions in the bile tract.

The conclusion Dr. Thomas reached in his scientific paper is that each surgical procedure is equally effective and that a choice as to which procedure is used should be based on the patient's particular problem and the surgeon's familiarity with the two methods.

* * *

Dr. William F. Via has assumed chairmanship of the Department of Oral Diagnosis at the UNC School of Dentistry.

Dr. Via, a nationally recognized researcher in oral radiology, received his D.D.S. degree from Ohio State University and his master of science degree from the University of Michigan.

He comes to UNC from the Connecticut School of Dental Medicine where he was head of the department of oral radiology. He has served on the faculty of Ohio State University, the University of California, and Henry Ford Hospital in Detroit.

* * *

The 1963 class of the University of North Carolina has announced the establishment of the Mrs. Bruce F. Caldwell Memorial Scholarship Fund.

The Scholarship will be awarded annually to a married student at the UNC School of Medicine on the basis of need. Present plans are for a \$500 award, but if available funds increase the amount may become larger.

* * *

Professor George Klein, of Stockholm, Sweden, gave the second lecture in the series, "Genes of Mice and Men," sponsored by the University of North Carolina School of Medicine.

He spoke about variations in the properties of tumor cells.

Professor Klein is director of the Department of Tumor Biology at Karolinska Institute of Stockholm. He completed his medical education and obtained his M.D. in Sweden.

* * *

The medical library of the late Dr. Hunter Sweaney, longtime prominent Durham surgeon, has been bequeathed by will to the University of North Carolina School of Medicine, it was announced recently.

Prior to his death Dr. Sweaney had given scores of valuable volumes to the School of Medicine, and under provisions of his will the remainder of his medical and health sciences library will go to the University.

In 1968 Dr. Sweaney and his daughters, Mrs. Mary Sweaney Anderson of Chapel Hill and Miss Betty Sweaney of Washington, D. C., established by endowment the Dr. Hunter Sweaney Visiting Lectureship in Surgery.

The endowment provided that the lectureship

should alternate between the UNC and Duke University Schools of Medicine.

* * *

Doctors and theologians from throughout the Southeast assembled at the University of North Carolina School of Medicine in September for a two-day symposium on medicine and religion entitled "Dialogue and Dilemma Medicine and Religion."

The program was sponsored by the Medical Society of the State of North Carolina—Committee on Medicine and Religion, the American Medical Association—Department of Medicine and Religion, and the University of North Carolina School of Medicine.

The symposium was divided into three subject headings: "Life, Death and the Days Between."

* * *

Some 150 pharmacists from throughout North Carolina and surrounding states met in Chapel Hill for the Third Annual Carolina Hospital Pharmacy Seminar.

It was sponsored by the University of North Carolina School of Pharmacy and the N. C. Society of Hospital Pharmacists.

The general theme of the conference was "The Hospital Pharmacist Specialist." Topics covered ranged from clinical pharmacy to radiopharmacy.

* * *

Dr. Richard M. Peters, M.D., former professor of surgery at the University of North Carolina School of Medicine, is the author of a new book entitled "The Mechanical Basis of Respiration."

* * *

Miss Vella G. Nelson, chief nurse anesthetist at North Carolina Memorial Hospital, was elected president-elect of the American Association of Nurse Anesthetists (AANA) at the annual meeting held in Chicago recently.

For the past two years, she has served as one of six AANA trustees in the United States.

Miss Nelson is a past president of the North Carolina Association of Nurse Anesthetists and of the Carolinas-Virginias Assembly of Nurse Anesthetists.

She is a graduate of the Roanoke Rapids Hospital School of Nursing and the North Carolina Baptist Hospital School of Anesthesia in Winston-Salem.

Before becoming chief nurse anesthetist at NCMH, Miss Nelson helped establish anesthesia departments at Roanoke-Chowan Hospital in Ahoskie and Johnston Hospital in Smithfield.

She was instrumental in planning the Grant-in-Aid Anesthetists Act which passed the 1963 General Assembly.

* * *

Miss Betty Marie Daniels has been named Supervisor Pharmacist, responsible for Inpatient and Outpatient Dispensing in the Division of Pharmacy Services at North Carolina Memorial Hospital. She

has also been appointed an Instructor in Pharmacy at the School of Pharmacy, the University of North Carolina at Chapel Hill.

Miss Daniels is a 1963 graduate of the Medical College of Virginia. After four years in community and hospital pharmacy, she entered the graduate program at the University of North Carolina and received her M.S. in Hospital Pharmacy in June 1969. She also completed a residency in hospital pharmacy at North Carolina Memorial Hospital concurrent with her graduate program.

* * *

Dr. Conrad Seipp has been named associate director of the University of North Carolina's Health Services Research Center.

The Center was established in 1968 to seek "new ideas in the delivery of health services."

Director of the new Center is Dr. Cecil Sheps who came to UNC Jan. 1 of this year from New York City, where he was general director of Beth Israel Medical Center.

Dr. Seipp comes to Chapel Hill from Yale University. He was an associate professor at the University of Pittsburgh from 1962 until 1967 after having served on the University of Puerto Rico faculty.

In addition to his teaching duties here, Dr. Seipp will hold the rank of professor in the Department of City and Regional Planning.

* * *

The University of North Carolina has received a \$44,000 National Science Foundation grant for research entitled: "Theoretical Aspects of Protein Structure."

Dr. Jan Hermans of the Department of Biochemistry will be the principal investigator for the two year program.

NEWS NOTES FROM THE DUKE UNIVERSITY MEDICAL CENTER

Clarence H. Cobb, business manager of the Medical Private Diagnostic Clinic at Duke University Medical Center for the past 31 years, has been promoted to director of the clinic.

Three other administrative changes within Duke's M.P.D.C. and the appointment of a liaison official between the clinic and the Department of Medicine also have been announced.

In his new position, Cobb assumes administrative responsibility for the operation of the clinic and oversees all its activities.

A 1938 graduate of the Duke Program in Hospital Administration, Cobb came to Duke in 1933 following completion of his undergraduate work that year at the University of North Carolina in Chapel Hill. He is a member of the Medical Group Management Association and a fellow in the American College of Clinic Administrators.

Promoted to business manager of the clinic was Ralph Hawkins, formerly assistant business manager. He is in charge of general operations of the

clinic. Hawkins is a 1961 graduate of the University of North Carolina in Chapel Hill with a B.S. degree in business administration, and is a member of the M.G.M.A.

New assistant business manager is Patrick Lavern Powell, a graduate of UNC in 1964 with a degree in business administration. He came to Duke following four years in accounting with Liggett and Myers, Inc., of Durham.

William J. Donelan has been appointed insurance office supervisor for the clinic. He recently completed a B.A. degree in political science at Wheeling College in Wheeling, West Va., and has done graduate work in law at UNC.

In addition, James C. Mau, administrative assistant in the Department of Medicine at Duke, has been named associate director of the Medical P.D.C. for the Department of Medicine. In his new position, Mau will aid in long-range planning of the clinic and serve as a liaison between the private practice of medicine and other affairs of the department.

Mau, also administrative director of the Physician's Assistant Program, is a 1957 graduate of the University of Iowa.

* * *

In a continuing move to share its knowledge and resources with other communities and institutions, the Duke University Medical Center has entered into an educational agreement with the Doctors Hospital in Washington, D. C.

Dr. William G. Anlyan, vice president for health affairs at Duke, announced the agreement and noted mutual benefits in the plan.

"The agreement," he said, "will enable our students, faculty, and staff to observe a working model of a health care delivery system in a large metropolitan setting—a model which we have not heretofore observed in our relationships."

"In turn," he said, "it will provide educational opportunities for physicians and staff at Doctors Hospital through the availability of Duke's educational and medical research program."

The Duke Medical Center already has a number of working relationships with other institutions. Highland Hospital, a psychiatric facility in Asheville, N. C., and Sealevel Hospital on the North Carolina seacoast are parts of the Duke Medical Center.

Within Durham County, Duke has affiliations with the VA Hospital, Watts Hospital, Lincoln Hospital and McPherson Hospital.

"In addition," Anlyan said, "Duke's departments of psychiatry, obstetrics-gynecology and pediatrics have on-going daily relationships with the county health departments of Halifax and Warren counties in northeastern North Carolina on the Virginia border."

Under the agreement, Duke's medical students may elect to spend some working time at Doctors Hospital on a non-credit basis as they do at other hospitals, particularly in North Carolina.

Monthly Perinatal Mortality Report

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES: NORTH CAROLINA,
AUGUST 1969 AND MOST RECENT 12-MONTH TOTALS

County	WHITE				County	NONWHITE												
	Perinatal Deaths		Total Deliveries Sept. 1968 - Aug. 1969	Perinatal Rate Per 1,000 Deliveries		Perinatal Deaths		Total Deliveries Sept. 1968 - Aug. 1969	Perinatal Rate Per 1,000 Deliveries									
	August 1969	September 1968 - August 1969				August 1969	September 1968 - August 1969											
NORTH CAROLINA	186	1887	67157	28.1	174	1340	27607	48.8										
ALAMANCE	4	37	1336	27.7	1	22	427	51.6	PENDER	1	8	140	5.7	7	124	11.0		
ALEXANDER	2	12	293	41.0		3	48	-	PERDUE			52	-	1	53	-		
ALLEGHANY		4	127	-			2	-	PERSON	1	7	252	2.8	2	12	205		
ANSON		6	156	38.5	1	14	276	80.7	PITT	1	21	717	29.3	4	21	659		
ASHE	1	13	292	44.5			3	-	POLY	1	2	139	-	1	4	33		
AVERY		8	240	33.3			4	-	RANDOLPH	3	22	1204	1.1	6	155	24.5		
BEAUFORT	1	12	390	30.8	2	16	228	70.2	RICHMOND	2	15	481	31.2	1	14	281		
BERTIE		3	95	3.1	1	11	286	38.6	ROBERTSON	1	15	598	25.1	6	60	1350		
BLADE	1	8	248	32.6		10	192	52.1	ROCKINGHAM	5	36	980	36.7	1	17	425		
BRUNSWICK		6	272	20.1	1	6	157	38.2	ROWAN	1	28	1114	25.1	2	18	323		
BUNCOMBE	6	67	2096	32.0	2	13	254	51.2	RUTHERFORD		20	750	26.7	9	138	65.2		
BURKE	4	32	1025	31.2		3	82	-	SAMPSON	1	13	379	34.2	2	24	337		
CABARRUS	2	30	1038	28.9	1	13	279	48.6	SCOTLAND	2	13	300	43.3	2	14	259		
CALDWELL	3	40	1123	35.6		4	87	-	STANLY	2	29	620	46.8	5	129	35.4		
CAMDEN		1	54	-			33	-	STONES	1	11	293	37.5	1	48	-		
CARTERET	4	17	561	31.4		2	76	-	SHIRRY	4	31	900	34.4	4	64	-		
CASWELL	4	4	125	-	1	9	159	56.6	SWAIN	1	3	110	-	1	52	-		
CATAWBA	7	37	1503	24.6	1	10	227	44.1	TRANSYLVANIA	1	11	306	35.9		18	-		
CHATHAM	4	4	324	-	2	7	183	38.3	TYRRELL			27	-	2	26	-		
CHEROKEE		4	303	-		2	16	-	UNION		21	696	2.1	2	11	287		
CHOWAN			85	-		5	94	-	VANCE		9	324	27.8	2	22	398		
CLAY		2	66	-				-	WAKE	4	70	3071	22.8	6	67	1194		
CLEVELAND	1	24	956	25.1	3	22	434	50.7	WARREN	1	3	69	-	5	165	30.3		
COLUMBUS	1	12	540	22.2	1	12	325	36.9	WASHINGTON	1	5	114	43.9	2	17	164		
CRABEN	5	30	1189	25.2	2	24	363	66.1	WATAUGA	12	366	35.8			4	-		
CUMBERLAND	8	119	3754	31.7	9	62	1335	46.4	WAYNE	3	21	1072	19.6	8	26	537		
CURRITUCK			56	-		2	32	-	WILKES	4	23	799	28.8		63	-		
DARE	1	1	113	-			12	-	WILSON	1	9	532	16.9	2	27	573		
DAVIDSON	7	48	1444	33.2	2	11	255	43.1	YADKIN		10	361	27.7	1	34	-		
DAVIE	8	286	28.0	-		4	68	-	YANCEY	2	6	202	29.7	1	5	-		
DUPLIN	3	11	348	31.6	1	11	281	38.1	CITIES									
DURHAM	6	31	1455	21.3	1	34	910	37.0	City totals are also included in county totals									
EDGEcombe	10	43	22.1	3	25	527	47.4	ALBEMARLE	5	171	28.2	1	3	43	-			
FORSYTH	10	72	2781	25.9	3	66	1144	57.7	ASHEVILLE	1	25	755	33.1	1	11	221		
FRANKLIN	5	190	26.3	2	16	248	64.5	BURLINGTON	1	12	571	21.1	5	123	49.7			
GASTON	6	72	2512	28.7	2	25	479	52.3	CHAPEL HILL	6	313	19.7	1	5	49	-		
GATES		32	-	-	5	83	-	CHARLOTTE	10	76	3168	24.0	3	70	1860			
GRAHAM	2	95	-	-		12	-	CONCORD	9	218	41.7	1	5	93	-			
GRANVILLE	6	217	27.6	17	340	50.0		DURHAM	3	18	958	18.8	1	30	792			
GREENE	2	93	-	-	6	146	41.1	EDEN	7	219	20.3	1	30	792				
GUILFORD	12	113	3790	29.8	6	77	1548	48.4	ELIZABETH CITY	3	34	1021	33.3	6	30	578		
HALIFAX	2	7	386	18.1	4	25	595	42.0	FAYETTEVILLE	1	22	843	26.1	1	11	199		
HARNETT	3	23	587	28.2	2	15	326	46.0	GASTONIA	1	8	315	25.4	4	18	256		
HAYWOOD	3	22	691	31.8	2	19	-	GOLDSBORO	7	45	1790	25.1	4	41	911			
HENDERSON	2	26	708	36.7	1	45	-	GREENSBORO	1	10	312	32.1	1	9	203			
HERTFORD	1	2	125	-	19	244	77.2	GREENVILLE	5	140	35.7	1	10	170	59.8			
HOPE	3	116	-	-	7	224	51.3	HENOERSON	4	10	360	27.8	8	104	76.9			
HYDE	1	1	39	-	1	2	40	-	HICKORY	4	10	360	27.8	2	22	419		
IREDELL	4	33	926	35.6	2	22	313	70.3	HIGH POINT	4	28	809	34.6	2	22	419		
JACKSON	2	7	283	24.7	1	1	52	-	JACKSONVILLE	9	414	27.7	3	45	-			
JOHNSTON	3	26	760	34.0	2	17	308	55.2	KINSTON	3	278	-	1	13	239			
JONES			64	-		2	73	-	LENDIR	1	4	202	-	1	44	-		
LEE	5	394	22.7	7	160	43.8		LEXINGTON	1	10	285	35.1	2	5	84	-		
LENOIR	1	13	575	22.6	2	22	455	48.4	LUMBERTON	3	224	-	2	14	191			
LINCOLN	18	522	24.5	5	90	-		MONROE	5	142	36.1	2	6	71	-			
MCDOWELL	21	528	39.8	1	1	37	-	NEW BERN	3	174	-	2	8	115	68.6			
MCDON	1	7	203	34.5	1	1	8	-	RALEIGH	3	38	1590	28.9	2	41	603		
MADISON	7	233	30.0	2	17	255	66.7	REIDSVILLE	1	8	158	50.6	1	3	103	-		
MARTIN	1	9	204	44.1	2	25	66.7	ROANOKE RAPIDS	1	5	178	28.1	2	2	44	-		
MECKLENBURG	16	116	4774	54.3	9	79	2155	26.7	ROCKY MOUNT E	1	3	201	-	1	10	151		
MITCHELL	1	5	208	24.0		3	-	ROCKY MOUNT N	1	3	233	-	11	42	96.4			
MONTGOMERY	1	5	251	19.9	5	122	31		SALISBURY	1	5	207	24.2	8	129	60.0		
MOORE	18	501	35.9	1	11	228	48.2	SANFORD	4	170	-		3	73	-			
NASH	2	10	534	18.7	1	27	402	54.9	SHELBY	4	216	-		6	123	48.8		
NEW HANOVER	2	31	1125	27.6	2	17	421	40.4	STATESVILLE	1	10	251	29.9	1	9	134		
NORTHAMPTON			99	-	13	277	46.9	THOMASVILLE	1	10	178	56.2	4	103	-			
ONSLOW	3	56	2109	26.6	1	21	422	49.8	WILMINGTON	2	18	579	31.1	1	14	352		
ORANGE	20	875	22.9	1	10	220	43.7	WILSON	1	5	277	18.1	2	14	273			
PAMLICO	3	72	-	-	4	57	-	WINSTON SALEM	5	30	1446	21.7	3	63	1083			
PASQUOTANK	1	6	291	20.6	1	9	175	51.4										

Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

Doctors Hospital is an 11-story, private, 323-bed hospital, three blocks from the White House. It is part of a large complex which includes four high-rise medical office buildings housing approximately 365 physicians.

Doctors Hospital has a tradition of physician participation in its administration and policy.

The postgraduate medical education program is aimed at individualized training of the house staff member for his future requirements as a practicing physician. Under the supervision of the director of professional services—former Surgeon General of the United States Air Force, Dr. Richard L. Bohannon—the interns and residents receive broad exposure to a varied medical and surgical experience from a full-time teaching staff.

* * *

The medical scientist training program at Duke University, which permits students to work simultaneously toward the M.D. and Ph.D. degrees, is entering its third year with 11 new enrollees. Among them is Ronald Wayne Joyner of Troutman, N. C., a graduate of the University of North Carolina.

Successful candidates must meet entrance requirements of the Duke School of Medicine and the Graduate School of Arts and Sciences, under whose joint auspices the program is conducted.

Four years of post graduate work normally are required for either an M.D. or Ph.D. degree. But the Duke program, by eliminating duplication and overlap in the course work, enables the students to obtain both degrees in six or seven years.

If a trainee leans toward a medical specialty after securing the M.D. and Ph.D. degrees the study time will last even longer than seven years.

NORTH CAROLINA REGIONAL MEDICAL PROGRAM

A state-wide central cancer registry—a decade-long dream of local and state-wide health agencies—has completed its first six months of operation, the North Carolina Regional Medical Program revealed as it reported samplings of the new registry's statistics.

The three-year pilot project was recommended in 1967 by the Governor's Commission to Study the Cause and Control of Cancer, but it had been under discussion for more than ten frustrating years by the American Cancer Society and the American College of Surgeons. Thwarted for lack of funds until October, 1968, the comprehensive registry became reality with a federal grant through the North Carolina Regional Medical Program.

The function of the registry is to accumulate data needed by physicians and hospitals for more effective follow-up of cancer patients. It was instigated with the provision that, once established, it would be taken over by the State Board of Health in accordance with statutory requirements in North

Carolina that all cases of cancer be reported.

The registry is funded for the current fiscal year with an RMP grant of \$111,888. Dr. James F. Newsome, associate professor of surgery, University of North Carolina, is the project's director.

Other groups cooperating in its launching include the North Carolina State Medical Society, the North Carolina State Board of Health, Bowman Gray School of Medicine, UNC School of Medicine, Duke University School of Medicine, and community hospitals.

First statistics samples embrace 1,417 cancer patients at Duke Hospital, North Carolina Memorial, New Hanover, Catawba, Charlotte Memorial, North Carolina Baptist, Southeastern General, Watts, Craven County, and the Veterans Administration.

The Month In Washington

Health, Education and Welfare Secretary Robert Finch has asked a special task force on Medicaid to examine and make recommendations on proposals for a sweeping national health program.

The task force, headed by Walter J. McNerney, president of the Blue Cross Association, is scheduled to issue a report about the first of the year.

After referring to a proposal for universal health insurance endorsed by many governors at the National Governors' Conference, Finch told McNerney in a letter:

"I would like specifically to request that the Task Force consider, along with its other deliberations on Medicaid and related programs, what directions and initiatives you feel the HEW Department should pursue in this area."

According to McNerney, one phase of the study would include the extension of medicare to persons of all ages, roughly the national compulsory health plan backed by Walter Reuther of the United Auto Workers and his Committee of 100 for National Health Insurance.

McNerney, however, also said that all types of mass plans would be studied, including the health insurance tax credit proposal endorsed by the American Medical Association.

The rapidly rising costs of medicare and medicaid have brought the issue to the fore-

front. The Administration said older people who enter the hospital after January 1 will have to pay for an additional \$8 of their hospital bills due to the higher costs. The increase is required by law.

The benefit cutback results from an adjustment of the portion of the hospital bill for which a medicare beneficiary is responsible if these costs have risen substantially.

* * *

After a two-year study, Sen. Abraham Ribicoff (D., Conn.), former HEW Secretary, said he has reached the conclusion the federal health effort "is a planless conglomeration of programs administered by more than a score of agencies and departments."

Federal health spending "instead of supporting programs to provide for the health of the people . . . is maintaining a cumbersome, disjointed bureaucracy that even key government officials have difficulty managing," he told the Senate.

"Instead of eliminating problems, (they) may be adding to factors such as rising costs, limited access to care and the fragmented organization of health services."

"There are so many programs administered in such bureaucratic confusion that no one—not the HEW Department, not the Bureau of the Budget nor any private organization was able to tell the subcommittee even how many programs there are."

* * *

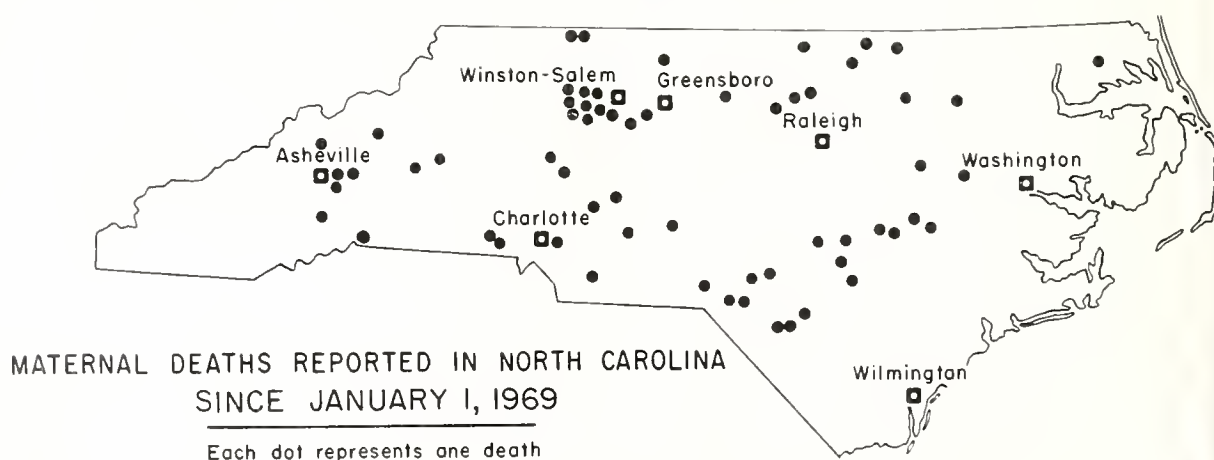
The American Medical Association told Congress drug dependent persons should be treated as patients rather than criminals.

In testimony before the Senate Juvenile Delinquency Subcommittee, Henry Brill, M.D., chairman of the AMA's Committee on Alcoholism and Drug Dependence, said physicians are concerned over legislation before the Subcommittee proposing harsher penalties for persons unlawfully possessing drugs for their personal use.

"Mere possession for personal use of depressant and stimulant drugs having a legitimate medical usage should not constitute an offense," Dr. Brill said. "The degree of social hazard and the reasons for having the drug should be taken into account."

"With respect to the entire section on offenses and penalties, we propose an amendment to direct courts to appoint a panel of medical experts in each case where a drug abuser is brought to trial on a charge of illegal possession and where, in the court's opinion, medical treatment may be indicated. The panel would make a determination as to whether the defendant has a medical problem associated with his abuse of drugs—a physical or psychological disability or drug dependence.

"If medical treatment is indicated, the panel would recommend to the court the type of treatment needed—that is, general—medical or psychiatric care; in-patient hospitalization or clinical treatment; group therapy; half-way house, etc. If medical treatment is not indicated, or if measures in addition to medical treatment are needed, the court would then consider the non-medical handling of the case."



The Carcinoid Tumor, Syndrome and Spectrum -- A Review of Literature
Alan J. Simpson
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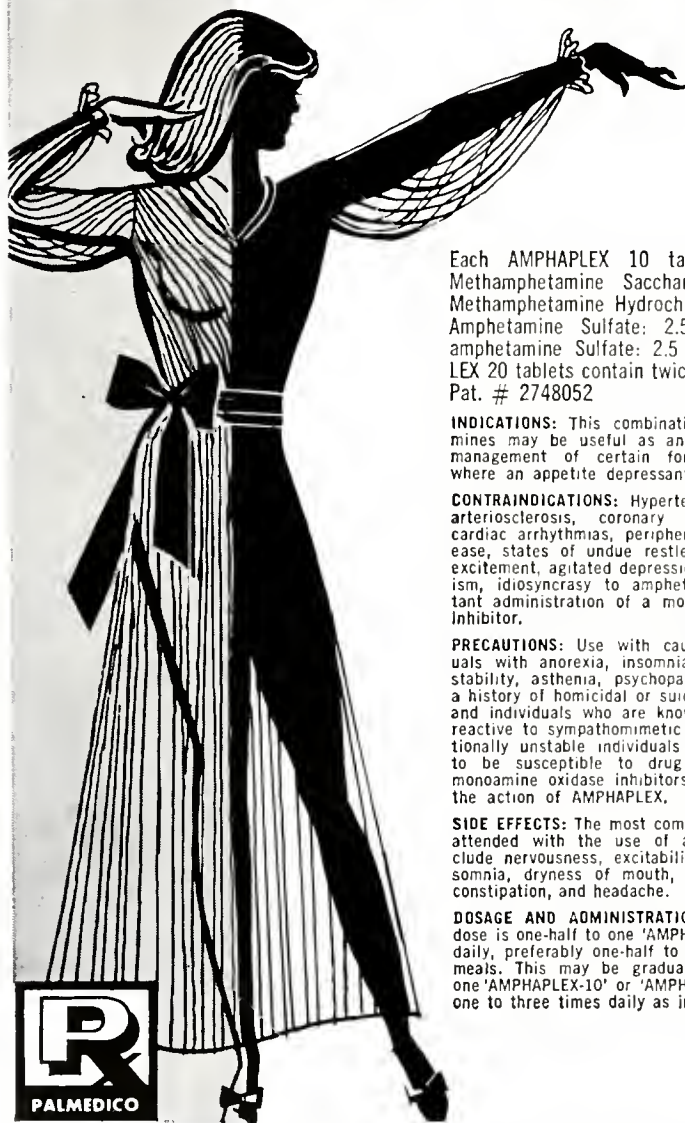
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The Role of the Physician in Suicide Prevention

ROBERT L. GARRARD, M.D.

The problem of suicide is a major concern of the medical profession, general physicians and specialists alike, and dealing with suicidal patients is no longer the province of psychiatrists alone. When one considers the magnitude of suicide in the United States, it becomes increasingly clear that the medical profession as a whole must be mobilized to reduce this wanton waste of life.

Statistics indicate that approximately 25,000 *known* suicides occur each year. Experts in suicidology, however, believe that probably two or three times that number of deaths would be classified as suicides if all the facts were known. Suicide is ranked as the tenth leading cause of death in the United States, and, according to World Health Organization, it is the fourth leading cause of death between the ages of 14 and 45. It is the third leading cause of death among teenagers, and the second among college students. A less known fact is that the number of suicides is approximately three times the number of homicides each year.

Physicians encounter self-destructive impulses more and more frequently in their patients, and the public has become more aware of suicidal deaths in the community. Attention is now directed toward suicide prevention, including community educational programs and the establishment of suicide prevention or crisis control services. Every physician should take an interest in these programs, since inevitably he will be involved in crisis situations. However, family

physicians and psychiatrists will continue to carry the heaviest load of these patients.

Recognition of Suicidal Risk

Statistics show that fully three-fourths of all persons committing suicides have been seen by a physician during the last six months of life. Physicians, therefore, have an obligation to recognize and evaluate the danger signs of suicidal risk.

There are many misconceptions and taboos concerning suicide, the most common being that a person who threatens to take

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his life will not do it. Quite the opposite is true. Another myth is that such a person must be insane, or that he will remain suicidal for the rest of his life. Most suicidal persons indicate their intention in some way, usually they are not insane in the legal sense, and the suicidal crisis is generally temporary.

A physician, whose life and philosophy are totally committed to the preservation of life, may find the thought of self-destruction incomprehensible, even abhorrent. In his desire to prolong life and give comfort to his patient, he may overlook the danger of self-destruction when he is prescribing strong drugs. Many patients commit suicide by an overdose of prescribed drugs, and among women drugs now account for the highest proportion of suicides (30%), with hanging a distant second (19%). A large percentage of suicidal attempts are made by ingesting drugs. Depression, whether overt or masked, should always be a warning to the physician to exercise great caution in prescribing drugs. If he is treating

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Chairman, Ad Hoc Committee on Suicide Prevention Committee on Mental Health, Medical Society of N. C., other members. Drs. Thad Barringer, Philip G. Nelson, Charles R. Vernon, Carl Wellish.

an alcoholic patient, even greater vigilance is required.

Persons who are profoundly depressed and have made the decision to commit suicide are not likely to see a physician voluntarily. They are convinced that no one can help them. Thus it becomes vitally important for the *relatives* of depressed persons to be alerted to the danger of suicide, as the responsibility for obtaining medical help falls on them. Suicide prevention actually becomes a phase of public or community education, with physicians as leaders.

Virtually all persons who commit suicide in some manner indicate their intentions. If these coded "cries for help" are understood and correctly interpreted by those closest to the intended victim, and this information is transmitted to the physician, appropriate steps can be taken to protect and treat the patient until the crisis is past.

Over the past 20 years there has been a definite change in the physician's attitude toward discussing suicide with his patients. Previously he asked only indirect questions, and made every effort to avoid the suggestion of suicide. Now it has become customary to be quite frank and to use direct questions to elicit suicidal trends. Surprisingly, patients are often relieved to have their suicidal thoughts and preoccupations brought into the open. Plain talk becomes more valuable as the physician gains skill in recognizing depression, which is often masked by vague, ill-defined somatic complaints. Lethargy, lack of interest, a disturbed sleep pattern, and poor appetite are some of the less obvious indications of suicidal intentions. Frequently chronic anxiety is associated with depression.

Underlying Disorders

Physicians should be aware that from the psychiatric standpoint attempted *suicide* usually represents a different clinical entity from *committed suicide*. Suicide, attempted suicide, suicidal gestures, and suicidal thoughts may be considered in terms of three basic categories of disorders: (1) depression, of varying severity; (2) character disorders—*i.e.*, hysterical, sociopathic,

manipulative types; (3) disorders combining elements of both (the "cry for help").

Depression

Physicians must be aware of certain high-risk groups, such as persons suffering from depression. Professional and white collar persons are the most vulnerable socioeconomic groups. It is well known that physicians, dentists, lawyers, ministers, executives, and others bearing more than the average load of responsibility, are predisposed to suicide. The highest rate in this group is found among psychiatrists. The personality of persons choosing any of these professions, with their attendant responsibilities, may help to explain this high suicide rate. Successful men, often in the prime of life, may become severely depressed and end their lives.

The elderly, among who depression is fairly common, constitute another extremely high risk group. Since alcohol is a factor in a large percentage of cases, alcoholics are a very high risk. The risk is also great among divorced, single, and widowed people.

Suicide occurs at all social and economic levels, and it occurs most frequently among white males. In women, the rate rises during the menopausal or involutional period, and increases with advancing years, so that in the aged, the incidence is essentially equal for men and women. It is becoming apparent that suicide among young people is increasing sharply. Depressions, especially veiled depression, must be considered a grave suicidal risk.

Character disorders

Most people who attempt suicide fall into the second category—those with character disorders, or the hysterical-manipulative types. They have only a fleeting wish to die, and their attempts are frequently impulsive. Often they attempt suicide as a gesture of defiance and hostility, or to hurt and punish others. Most such attempts are made by women, frequently in the late teens to early thirties. Unless the underlying problems are resolved, such attempts may be repeated again and again, and can become a charac-

teristic response to frustrations. Death is seldom desired or intended; the suicidal act is frequently dramatic and usually of low lethal potential. However, such people do die occasionally, when a prearranged rescue plan fails, and thus become "accidental suicides."

Basic inadequacy

The third category combines elements of the first two. Suicide attempts may be made to communicate profound distress, a loss of inner resources, and feelings of inadequacy and worthlessness; such attempts must be construed as "cries for help." Most of these suicidal patients are ambivalent, with the wish to die pitted against the wish to live. The suicidal crisis is generally brief, and if a patient can be helped to overcome it, he may never again resort to such attempts. On the other hand, if the "cries for help" are not understood or heeded, the person may try again, generally using a more lethal method with each attempt.

Reported Incidence

There is no accurate record of suicidal attempts, although the total is estimated to be anywhere from 10 to 50 times the number of completed suicides. Many suicide attempts never become known to physicians, hospitals, or the police. Most suicides are preceded by one or more attempts, thus building up a tremendous reservoir of potential suicides in this country. Depressed, suicidal patients must be recognized and treated if they are to survive their crisis. Chronic repeaters must be recognized, not only as the inadequate, hostile, immature, manipulative individuals they frequently are, but also as potential suicides who may still be helped.

The significant signs of suicidal intent can be easily recognized by physicians if they evaluate seemingly innocuous statements made by patients and correlate actions that would have little importance without other factors, primarily depression. For example, if a depressed person writes a will, gives away treasured possessions, makes arrangements for a long absence, offers state-

ments such as, "I don't want to be a burden any longer"; "There is nothing left for me"; "My family would be better off without me"; "Nobody needs me"; or any combination of such indications of suicide, he should be taken seriously and protected from self-destructive acts. The danger is increased still further if the person has suffered a recent loss. Frequently the patient is preoccupied with his health and convinced that he has a fatal disease—signs that should warn the physician that the danger of suicide cannot be discounted.

There is no uniformly accurate method of reporting suicides. Many such deaths are incorrectly reported as accidental, and occasionally even as resulting from natural causes. Frequently the relatives of a suicide will bring pressure on the physician to modify a death certificate, partly to protect family reputation and salvage family pride, but also to collect insurance by reporting the death as an accident. Accidental deaths often carry double indemnity, while suicidal deaths may void benefits altogether. Apart from financial considerations, however, there is always a stigma attached to a suicidal death, and families—even whole communities—suffer feelings of guilt.

In doubtful or "equivocal suicides," studies have shown that further investigation brought about changes from accident to suicide far more frequently than from suicide to accident. In many communities automobile accidents, especially the one-car accidents, are suspect and are now scrutinized much more closely than formerly. In any event, physicians should encourage consultation with the police and medical examiner in evaluating doubtful cases.

Prevention

During the past ten years the number of suicide prevention centers and programs has increased from less than a dozen to over 100. These centers usually use trained volunteers operating an emergency telephone service, many on a 24-hour basis, and referring troubled callers to physicians or appropriate community resources for help. Physicians have a vital concern in these centers, and

can be of tremendous help in training the volunteers who staff them and in serving as consultants or board members. Physicians can also explain the problem of suicide, alert individuals and lay groups to the danger, and dispel some of the misconceptions and superstitions that still remain. Whatever the physician can do, directly or indirectly, to promote better mental health in his community will contribute to a reduction in suicide.

Prevention of suicide has become a major health responsibility. The World Health Organization has suggested that the high-risk groups be identified, and it lists as examples the old who are in ill health or lonely, or who face loss of occupation and lowering of income through retirement; students and middle-aged women who have no clear-cut wish to die but resort to suicidal behavior to alter their life's situation; the mentally sick; heavy drinkers; persons in "socially disorganized areas" marked by overcrowding, the presence of immigrants, divorced or separated persons, and a high crime rate.

The World Health Organization indicates that a second but no less important step is the prevention of repeated suicide attempts. All too often persons who have attempted suicide spend a brief period in the hospital and are discharged to face exactly the same situations that led to the first attempt. These are the people who need help and guidance in facing up to the situation that impelled them to attempt suicide. Systematic observation of these high risk groups should be developed as part of regular mental health services.

Conclusion

Suicide prevention must involve a coopera-

tive approach by many allied groups. In these projects the physician must assume leadership, for he is in a position to make helpful contributions. He must be in the forefront of community suicide prevention activities, just as he must recognize and care for the suicidal patients in his practice.

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Mental Illness: Who Is Sick?

ALI JARRAHIZADEH, M.D., M.S.P.H.

If the insane out-numbered the sane, jails and sanatoria would probably be filled with rational men who could not make sense or communicate with the majority.

How truly this old Persian saying expressed the age-long confusion of mental health versus mental illness, and effectively poses the question: Who is sick?¹

Millions of so-called mental patients are incarcerated in institutions all over the world. In this country, about half of all hospital beds, exceeding three-quarters of a million, are occupied by psychiatric patients, many of whom were committed against their will—a form of imprisonment, as Szasz stresses.² Thousands more are in regular attendance at their doctors' offices, or present themselves to welfare agencies and other public health and mental health organizations.³ The cost to the taxpayer amounts to millions of dollars each year. The loss to industry is no less.

Spending as much time, money, and manpower as we do for the care of these "mentally ill" leads one to suspect that we should be fairly familiar with the causes, manifestations, and treatment of such illnesses. Appropriate measures of prevention and the training of a corps of suitable people must be adopted if we are to meet the problem of these progressive and crippling disturbances which we find at all levels of society today.

Have we been really facing this problem? Are we taking an interpretive look at the roots of emotional and mental illness? Are we really doing all we can to protect ourselves against these terrifying disturbances? I do not think so. . . . We are looking, yes, but we are not probing deeply enough.

Current Attitudes and Practices

In spite of the current movement toward

community psychiatry and the more forward looking comprehensive mental health programs,³⁻⁶ in a good many areas even professional people tend to neglect the emotionally disturbed individual. They are not familiar with, nor are they tolerant of, this type of suffering, and consequently no significant effort is directed towards preventive measures, nor to the early recognition and the correct treatment of mental illness. Disturbed people are ignored or misunderstood and often not diagnosed until their behavior becomes too gross and disruptive to accord with the acceptable standard or norm of the community in which they live. Then the victim (not necessarily the most appropriate, and not the only one in need of help) is cut off from his environment by being shipped off, rather blandly, to a mental institution through various channels or social agencies.

The patient is often infuriated with the whole system which imposes this unwelcome and unasked institutionalization upon him, and understaffed institutions resent these unprepared and often inappropriate referrals. Thus an unsatisfactory therapeutic situation arises at the outset. When the patient is ready for discharge, the situation is no less unsatisfactory; for the institution finds the patient's community has no provision for accepting him back, much less for his after care. Thus hospitalization is prolonged, beds are occupied by patients who no longer need them, and the ultimate result is poor utilization of the hospitals and less and poorer service to those most in need.

This vicious cycle will continue until a better understanding of mental illness is achieved and cooperation between community and institution is well established, working hand in hand, each accepting its part of the total care of the patient. James L. Cathell,⁷ the traveling psychiatric consultant in North Carolina, speaks to this point by stressing "the total approach to mental health care." He encourages physicians to

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motivate and mobilize a broad spectrum of community services. These include public-health nurses, social workers, welfare agencies, homemaker services, rehabilitation workers, clerics, school counselors, and, of course, neighbors, friends and family.

Illustrative Cases

But instead of extending these generalities let us walk around a ward or two in a mental hospital and pick up a few examples to find out if we are yet moving in the right direction. I shall do the walking and summarize a few case histories (they are actual cases), and let you read and draw your own conclusion.

The elderly

The first case involves an elderly patient of the type which represents about one quarter of our hospital population.

Case 1: Mr. A.'s is a very simple and clear-cut case. He is a 68-year-old widower from a rather small town who was hospitalized for the first time on legal commitment because of increasing irritability, confusion, and inability to care for himself. His family doctor reported that the patient had been slightly depressed and had been experiencing some difficulty with his memory since his retirement a few years previously. However, he functioned fairly well, moving around the house and serving as a faithful companion to his elderly wife, who had been crippled by recurrent strokes. His condition began to deteriorate rapidly shortly after his wife died, leaving him on his own, grieving and lonely.

His family doctor took over the case at this time, treating the patient with antidepressants and support, with fairly good response, although he continued to show some apathy and irritability and remained somewhat confused. His family decided to move him from his large lonely home into a boarding home. The placement proved to be unsatisfactory, leading to more irritability and confusion. His adjustment to the new place and strange people was poor; he was deeply resentful. His condition progressively worsened, as shown by increasing irritability and confusion, difficulty in sleeping and eating, and consequent loss of weight. He was not taking care of his personal needs and became a nursing and management problem, leading to his commitment to our mental institution.

Mr. A. is described as having been a kind and hard working individual prior to his retirement. He raised five children, all alive and doing well with their own jobs and families.

During the first two weeks of hospitalization Mr. A. responded fairly well to mild tranquilization and a supportive attitude on the part of the hospital staff.

His appetite and sleep pattern improved, although his adjustment to the ward remained rather poor and he continued to have some difficulty in keeping up with things happening around him. In the staff review conference it was concluded that he had gained the maximum benefit from hospital care and was ready for discharge. It was felt, in fact, that he would do much better among familiar people in a place that he knew, where various kinds of stimulation—sensory, emotional, occupational—would be available, preferably in a supportive family environment. Although he showed little ability to learn new or complicated tasks and would get quite frustrated when he could not perform or adjust to new situations, it was thought that he would be helped by having something to do to occupy his time and, at the same time, nourish his strength and make him somehow feel useful.

The recommendations were communicated to his family (mainly his children), but their response was similar to that of the majority of families who are confronted with this kind of situation. None of them could have him in their home, because of their own family obligations and other responsibilities. Staying alone at his own place was not recommended, and no family member (they claimed) was available to stay with him all the time; in addition, they could not afford to hire a full-time helper for this service.

These problems, justified or unjustified, were not helping Mr. A. to leave the hospital nor giving the staff any clue toward a better solution. But keeping him in a mental hospital for the rest of his life did not seem to be either appropriate or economical.

One can ask, does this poor man deserve to have to stay in a mental institution among psychotics and retardates for the rest of his life? We should go even further by asking if this sad situation could not have been prevented? If Mr. A. had had some activity to keep him productive and some interest to occupy some of his time at the time of retirement, instead of being solely concerned with the care of his wife and later being constantly preoccupied with his own feeling of helplessness, he probably could have tolerated his loss better. He needed something else to turn to. Had there been some source of support and more appropriate care following his recent stress, his old defenses, though weakened, probably would have proved adequate.

By avoiding further stresses, isolation and rejection, this elderly man probably could have lived out of the hospital and remained helpful to himself and society for the rest of his life. Society was not prepared to foresee his problems and failed him at the time

of need. In fact, in many cases, tax laws and other social regulations discourage working at the age of retirement.

The rebellious adolescent

For our second case we will leave the mental institution and the aged population to take a look at the opposite end of the age scale—the adolescent. There is currently much publicity about adolescents' "misbehavior" and their immoral and dyssocial reactions, mainly in the Western world although recently spreading all over the globe. Many parents are greatly concerned, and some quite frustrated, about their rebellious teenagers; schools have much difficulty in handling them and are literally screaming for help; juvenile courts suffer from confusion and inadequate resources; mental health clinics and hospitals are receiving increasing numbers of referrals from various agencies.

Case 2: Miss B., a 15-year-old girl, was referred for psychiatric evaluation and recommendation because of frequent self-destructive behavior, involving her with the law on many occasions. Her parents say her difficulties began about three years ago when she began to "run around with the wrong crowd." She began to smoke and use vulgar language, and later was found to be drinking. She had had sexual experiences which resulted in one illegitimate pregnancy. She was suspended from school a few times for "unfit behavior," without any satisfactory result, and finally expelled in the middle of the ninth grade because of the pregnancy.

About one year previously she was involved in a car theft and sent to a training school. (Apparently stealing a car is considered the gravest legal offense and the most unacceptable behavior in this particular community). About a month previously, when she was discharged from the training school to her family, she broke probation by stealing another car and running away from the police in the hope of being shot and/or running off the road and getting killed. The court decided at this time to refer her to a psychiatrist for evaluation and recommendation.

During the psychiatric interview she impressed me as an attractive, rather nicely dressed young girl, who appeared older than her stated age of 15. She was talkative and open, stating that she was the product of an unsatisfactory marriage which ended with the disappearance of her alcoholic father when she was four years old, leaving her and her five-year-old brother with her mother. Her mother, who is a rather aggressive and domineering individual and very active in the community, was remarried five years later to another alcoholic, adding three more children to the

family. The family situation apparently is unimproved and there is much fighting and fussing at home. Her stepfather is unpredictable and abusive when drunk.

She discussed her shaky family situation in detail and admitted to her extreme anger and resentment towards her parents and her wish to get away from them permanently. She claimed that she had nobody to talk to and related many of her troubles to times when she had been angry and desperately lonely. She hated being involved in so many difficulties, claiming to have no control over her behavior. In elaborating on her psycho-sexual difficulties, she said that she behaved as she did for fun and out of curiosity, and she claimed to be innocent or ignorant about what she was "forced to do."

The rest of the interview was rather repetitious, indicating her anger, confusion, desperation, and helplessness, which led to her impulsive acts and continuous trouble. She demonstrated considerable anxiety and some evidence of depression during the interview, and in general did not fit into the psychopathic category.

While we were trying to make appropriate recommendations and immediate disposition of the case, society's shortcomings became more apparent. The first question was the suitability of returning her to her family; I doubted that this would work out unless her parents could get adequate help and guidance. If we could not accomplish that we would be faced with two alternatives: finding a proper place for her to live and continue her education, or sending her to a corrective and/or therapeutic institution such as a training school, mental hospital, etc.

Do we have any suitable place in the community where this youngster can receive adequate help? And is it beneficial for her to spend a good part of her developmental life in a mental institution among psychotics or in a jail among criminals? Then, what next? She might not have had to face these unfortunate circumstances if she had had a better family situation, or, alternatively, if she could have gotten the necessary help and supervision elsewhere. Had her parents had some counseling, they could meet their parental responsibilities better, providing a more satisfactory home situation for their children (a real mother instead of a successful club member, and a productive father instead of a passive and abusive drunk.

Gregory⁸ and Anderson⁹ point out clearly the significance of parental care, while emphasizing the importance of preventive psychiatry. If this patient had had satisfactory guidance and sex education at home or in school, it is possible that her sexual urge and curiosity would not have led to her sexual acting-out behavior and pregnancy, and her chances of finishing school would have been much higher. Even so, I wonder whether a misled pregnant student should be kicked out loose into the community. Should she not rather have been guided to get some help and support? Not infrequently an interested school teacher or a warm counselor can substitute for an inadequate

or absent parent, providing a satisfactory and healthy figure of identification for those confused adolescents who are about to deviate. I would like to ask a major question here. Has enough attention been given to help such parents and prepare such teachers and counselors for these crucial tasks?

Case 3: I would not like to leave the middle-aged group out of my discussion, but I will make the report very brief, although Mr. C. has a long history and an enormous number of difficulties, involving different community agencies. He is a 52-year-old married man who is a faithful client of the local aftercare clinic and comes regularly for some support and a prescription "to calm his nerves and help him sleep." He has had little education but has been a good worker all his life, providing adequately for his wife and seven children until about six years ago, when he had a car accident which apparently caused no significant organic difficulty. However, he began and continued to have various discomforts, some of them still present and bothersome, resulting ultimately in his being admitted to a mental hospital several times, often quite disturbed and unmanageable, and needing intensive treatment.

Mr. C. has been doing well since his last discharge two years ago, visiting the local mental health clinic every two months, when he complains about a few problems here and there, and takes a mild tranquilizer. He is believed to be able to handle a part-time job very well, and in fact work is strongly recommended for him, to increase his self-esteem, decrease his feelings of guilt and self-depreciation, and occupy the time that he otherwise would spend sitting around the house and wringing his hands. On the other hand, there are a few jobs available for an ex-mental patient, and even when he finds one, Mr. C. states in so many words, he loses his welfare and social security checks, which amount to much more than he can make in a part-time job, considering his age and education.

The fear of losing a safe and easy income has apparently prevented this man from becoming well and productive, and in fact has fed his disease. After all, how can the family or community blame this "poor sufferer" for not working, and how can supporting agencies reduce the help which this "sick, disabled individual" receives? In other words, I wonder if we are actually helping the sick or backing up the sickness. If there was more cooperation and coordination among various community agencies—namely, the welfare department, vocational rehabilitation, and mental health centers—in this case, things would be quite different for him.

Discussion

I hope I have not given the impression

that the above patients, and many others similar to them, are not sick and do not need adequate care, including medical and psychiatric treatment. Quite the contrary, for I strongly believe that they are really suffering and that helping them should remain the main responsibility of therapists in charge and capable of giving patient care. What I do want to stress, however, is that they are not the only people in need of help, and not necessarily the most disturbed ones. Estimates of the number of Americans in need of psychiatric care vary from one in ten to one in seven, and in many cases only the scapegoats seek help.³

Moreover, I should emphasize that locking elderly patients up in mental institutions, removing confused and disturbed youngsters from home and school by putting them in jails and training schools, and handing a monthly check to ex-patients as the price of not working, have proved to be unsatisfactory means of solving the increasing emotional problems which are facing the nation. The time has come when the leaders of communities, especially in the field of mental health, must take a hard, critical look at what they have been doing, and—most important—what they intend to do.

Local programs and centers

It is already recognized that increasing the number of hospital beds is not the answer. Much more can be achieved by strengthening local programs and community mental health centers. It is also true that it is not possible to provide enough psychiatric professionals to take care of all the emotionally disturbed; nor indeed would such a position be desirable or economical. Far better it is to prepare other disciplines and agencies to share the responsibility and discourage the traditional attitude of do-it-all and know-it-all. One should ask if adequate attention is being given to community programs, and whether any satisfactory attempt is being made to enlist the entire professional community in the campaign against mental illness. The answer becomes clear by examining the various state and federal budgets, which indicate that

community mental health centers and preventive programs receive less than 10% of the total provision for mental health, while direct patient care and institutions get the rest.¹⁰

In order to make use of different disciplines to help take care of patients, in and out of hospitals, and to develop local programs on an adequate scale, one should inquire if sufficient training is being offered to promote multidisciplinary functioning. As far as I can gather, many institutions and related community centers lack any satisfactory staff development programs. Such programs are a necessity, I believe, in any mental health movement, if it is to be at all progressive. Training contributes significantly toward better care for patients through keeping personnel up to date on new and better treatment methods and rehabilitation techniques. Training programs also prepare supporting personnel in such a way as to free the professional staff from many time-consuming tasks which take them away from direct patient care.

Training programs should involve hospital staffs, mental health centers, other health agencies and the community as a whole. Attention should be given to social re-education, focusing on society's view of mental illness, which is the nation's number one health problem. Having mutual and continuing educational activities for hospitals and communities might well bridge the gap between institutional projects and related community programs. We shall have made significant progress if we merge these two programs into one comprehensive system of service to and for all people.¹⁰

Social factors and mental illness

In support of my statements, I would like to quote two authorities in the mental health field who express their opinion about the impact of social factors on two major emotional disturbances—depression and suicide.

Dr. Francis J. Braceland,¹¹ formerly director and now senior consultant at the Institute of Living, in Hartford, Connecticut, notes that more than 90,000 depressed patients are hospitalized annually, and the

total population for whom family physicians, as well as psychiatrist, prescribe anti-depressant drugs must be calculated in millions. Why this tremendous case load, Dr. Braceland asks? Most likely to be blamed today are social factors: the progression from individual craftsmanship to the assembly line and thence to complete automation; the loss of warm, compact, social and professional groups sucked into amorphous masses in which no one can know everybody else; feelings of helplessness to do anything about urban tensions; and, worst of all, Viet Nam . . . all these may lead to depersonalization. But in absolute terms, these matters are no worse for modern Americans than were the conditions facing countless millions of people in the past.

A major—perhaps the major—difference today lies in a new awareness of insoluble dilemmas. This is especially true of the aged, so many of whom now have time to deplore their neglect and apparent rejection by the young, whereas only a generation ago most oldsters were busy helping their children and grandchildren, as well as maintaining themselves. And for adolescents, too, says Dr. Braceland, much of the seemingly manic behavior (the turbulence and acting-out now seen on college campuses) may represent an underlying depression resulting from a feeling of helplessness.

Dr. Paul Freidman,¹² psychoanalyst at Mt. Sinai Hospital in New York, focuses on suicide, which is among the ten leading causes of death in America (20,000 a year are reported). Suicide receives an even higher rank among adolescents, and is continually increasing. Dr. Friedman indicts contemporary society for its general permissiveness, which contributes to the increase in the number of suicides among young people. Immaturity, the failure to receive guidance and direction at home and in the schools, and the prevalence of violence in contemporary society, he suggests, may account for the increased number of adolescent suicides.

Conclusion

I conclude this paper, believing that we

are just at the beginning of a long and rough road towards a better mental health. I hope to meet you somewhere along the way. . . .

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Asthma Related to Chromium Compounds

Report of Two Cases and Review of the Literature on Chromate Diseases

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The deleterious effects of chromium compounds have been known since the first half of the 19th century. Cutaneous manifestations and nasal disorders, particularly septal ulceration and perforation, have long been recognized. There is also clinical and experimental evidence suggesting that chromium compounds play a role in neoplasia of the respiratory tract. These compounds may produce acute inflammatory reactions in the lower respiratory tract, and sensitivity to them may precipitate attacks of bronchial asthma. The following cases are examples of clinically typical asthma related to occupational exposure to chromic acid fumes in one case and zinc chromate primer paint in the other.

Case Reports

Case 1. A 23-year-old white married man began working at a textile engraving firm in September, 1963. Originally he was employed in the engraving part of the plant and was not exposed to chromic acid fumes. In April, 1964 he was moved to the chromium plating department, where he worked in close proximity to two tanks of chromic acid solution in which the chromium plating of the rollers was carried out. About two months later he began having dermatitis, predominantly of the hands but also with some involvement of the feet. The lesions were eczematous, fissured, and scaly. In August, 1964 he was transferred to the shipping and receiving department, and although he no longer worked closely with the chromium plat-

ing process, he nevertheless had to walk frequently through the room where this work was done. At these times he noticed that the chromic acid fumes were rather irritating when inhaled and produced a temporary sensation of tightness in the chest.

His dermatitis improved with local steroid treatment prescribed by his dermatologist. However, in mid-October, 1964 he began noticing nocturnal episodes of tightness in the chest, cough, wheezing, and shortness of breath. These symptoms could be temporarily relieved with a proprietary spray. Later in the month, with clearing of his dermatitis, oral steroids were discontinued. Shortly thereafter the patient began having constant wheezing and tightness in the chest both day and night, associated with some cough productive of very small amounts of tenacious sputum and some pain beneath the left scapula on coughing. His family physician prescribed penicillin, a bronchodilator, cough medication, an antihistamine, and prednisolone, 40 mg given daily for three days, resulting in some temporary improvement.

In December, 1964 there was an exacerbation of dermatitis, treated with tapering doses of triamcinalone. At about the same time one of the chromic acid tanks was closed down. The patient considered that tank to be poorly ventilated and the major source of chromic acid fumes in the environment. Shortly thereafter the dermatitis improved and the respiratory symptoms cleared almost completely.

There was a family history of asthma in the patient's mother and migraine in a maternal first cousin. At the age of 8 years, the patient had had a cough which lasted for about a year. He had smoked from one to two packs of cigarettes daily until discontinuing smoking the latter part of 1963. There was a history of a slightly stuffy nose for three to four years, and some running of the nose on exposure to dust for five or six months.

Physical examination in January, 1965 showed slight infection of the pharynx. The lungs were clear except for slight wheezes on forced expiration bilaterally. Chest x-ray films showed heavy bronchovascular markings in both lower lobes, interpreted as chronic non-specific inflammatory changes. Electrocardiogram and spirometric studies—including vital capacity, maximal voluntary ventilation, and forced expiratory volume (FEV) 1, 2, and 3—were normal.

The patient again experienced an exacerbation of dermatitis after discontinuing oral steroids in mid-March, 1965, having been asymptomatic just prior to that time. In the latter part of March, the regular chrome plating tank was closed down for repairs and the smaller tank again used. The patient became aware of chromic acid fumes in the air, which he found to be very irritating. He began to have a tickling sensation in his nose, followed by watering and sneezing and also by itching, burning, and watering of the eyes. Tightness in the chest returned, together with wheezing and shortness of breath. The latter symptoms were relieved by a bronchodilator, but he continued to have a slight burning sensation in the nose. Examination at that time revealed hyperemia of the pharynx and nasal mucous membranes but no septal ulceration. The lungs were clear except for a faint wheeze on forced expiration.

In April, 1965 his dermatologist again prescribed triamcinolone in tapering doses and recommended a change in occupation. The patient discontinued work at the textile engraving firm on April 16, 1965, after which he noticed a marked improvement in his dermatitis, and eventually complete clearing.

In October, 1965 the patient reported only one further isolated episode of nocturnal wheezing, in June, 1965, in association with a mild upper respiratory tract infection. There was also at the time a very slight suggestion of an eruption on the forearms which he attributed to "nerves." Patch tests after 48 hours showed a 1 plus reaction to chromium sulfate and a 3 plus reaction to potassium dichromate. Chest roentgenograms made in October, 1965 showed no change in the appearance of the heavy bronchovascular markings previously noted.

Case. 2. A 37-year-old white married man, who was a sprayer painter for a light machinery manufacturing company, was first examined September 30, 1958, at which time he gave a history of coryzal symptoms beginning one week previously, followed in two or three days by a dry cough which later became productive of yellowish sputum. There were several episodes of dyspnea in association with the cough. He also mentioned a feeling of irritation and of his chest "stopping up" on spraying a zinc chromate primer solution.

He had begun work with his company in 1952. At first he was a foreman and did little or no spray painting. Shortly before the onset of illness he had changed jobs, and had begun spraying paint regularly in a very hot room. Although he was exposed to many different types of paint solutions, he insisted that the only one which produced symptoms was a zinc chromate primer paint.

He stated that within five minutes after beginning to spray with this solution he would detect a sweet taste and smell and begin experiencing tightness of the chest, wheezing, coughing, and a feeling of a hot facial flush. These symptoms were accompanied by slight burning and running of the nose and watering of the eyes, and they would develop whether he wore a mask or not. He stated that other men at the plant also noticed irritation from this material, but that their symptoms were less severe than his.

There was no family history of allergic disorders. The patient smoked approximately one pack of cigarettes daily. His past health had been excellent.

On physical examination the patient appeared somewhat tense and apprehensive. Slight infection of the conjunctivae and slight hyperemia of the pharynx were noted. There were many inspiratory wheezes throughout both lungs, particularly at the right base. Chest roentgenograms showed exaggeration of the pulmonary markings in the right lung base but no definite pneumonic consolidation.

In March, 1959 he reported occasional slight dyspnea of three weeks' duration, and some productive cough. Temporary discontinuation of smoking had produced some improvement in his symptoms. Repeat chest films at this time were normal. The previously reported exaggerated markings in the right lower lung field had completely cleared.

In June 1961 he complained of dyspnea of one week's duration, together with non-productive cough, watering of the eyes, and nasal congestion, which he again associated with spraying the zinc chromate primer solution. Examination revealed slight redness of the throat. The nose was normal and the lungs were completely clear. Chest film was again negative.

In February, 1962 the patient began having episodes of acute dyspnea after lunch almost daily for a week or more. He was examined during one of these episodes and found to have expiratory wheezes throughout the lung fields. Good relief was obtained with the use of a rectal theophylline solution.

A series of ventilatory studies was done in February and April, 1962. Maximal voluntary ventilation was 63% of that predicted; FEV 1, 47%; FEV 2, 67%; and, FEV 3, 76%. Vital capacity was normal. Slight to moderate improvement followed treatment with various bronchodilator solutions.

The patient consulted an allergist in October, 1962 because of coughing, wheezing, tightness of the chest, dyspnea, and occasional orthopnea occurring at two- to three-week intervals and lasting several hours at a time. A nasal smear showed a significant increase in the percentage of eosinophils. Skin tests resulted in significantly positive reactions to elm, oak, and hickory tree pollen; Bermuda and Johnson grass; giant and short ragweed; dust, wool, feathers, cigarette smoke, pyrethrum, silk, cattle hair, dog hair, alternaria; and yeast, mucor, cabbage, corn, orange, and shrimp. He continued to have symptoms despite treatment with oral expectorants, bronchodilators, and prednisolone,

as well as a series of hyposensitization injections containing dust, mold, and pollen antigens.

The patient was transferred from the paint department, in January, 1963, after which he had no further symptoms of asthma whatever. He stated that he felt better than he had in years, and he eventually gained from 119 to 140 pounds in weight. In October, 1965 he was still asymptomatic. At that time a patch test to potassium dichromate 0.5% was negative after 48 hours, and a 2% solution of chromium sulfate elicited only a very faint erythema.

Discussion

Chromium was first identified in 1797. Within 30 years chromium compounds were mentioned in the medical literature as a cause of dermatitis and ulcerations in workers.¹

Chromium is a gray metal with a melting point of 1890°C. This element has valences of 2, 3 and 6, and forms both chromic salts and chromates. The bivalent chromous salts are unstable and are of no commercial importance. The two trivalent compounds are chromic oxide (Cr_2O_3), which is a green pigment, and chromic sulfate, which is used in tanning. The hexavalent compounds such as sodium dichromate are the most active ones chemically and the most widely encountered in occupational health problems.¹

Chromium compounds have useful properties that are applicable in many varied industries. The Public Health Service publication, *Occupational Diseases: A Guide To Their Recognition*,² lists 104 different occupations in which exposure to chromium compounds may be encountered.

Metallic chromium is nontoxic. The local effect of chromium compounds, especially the alkaline chromates and bichromates, is corrosive mainly upon the skin and mucous membranes of the upper respiratory and alimentary tracts. These compounds become fixed at the point of contact by forming a protein complex which is not readily hydrolyzed. Although systemic chromium poisoning of occupational origin is said to be exceptional,³ Pascale and others⁴ reported a case of toxic hepatitis with jaundice observed in a person employed in the chromium electroplating industry. Mild to moderate abnormalities disclosed by hepatic tests and liver biopsies, together with chrom-

ium in the urine, were found in four workers who were asymptomatic except for nasal lesions. The question was raised as to whether subtle systemic intoxication from chromium could be a health hazard. Trace amounts of chromium are normally present in the blood and urine.

Cutaneous Manifestations

Chromium compounds produce two separate and distinct types of dermatitis, one being due to direct irritation and the other to sensitization producing contact dermatitis. Chromic acid and the chromates are powerful skin irritants, having a corrosive, necrotizing effect on living tissue and causing the formation of the characteristic "chrome hole" or "chrome ulcer."^{1,6,7} There is no relationship between this type of necrotizing lesion and contact dermatitis, and workers with these lesions have no particular tendency to develop sensitivity to chromates.

Contact dermatitis due to chromate sensitivity may vary from an acute vesicular, weepy eruption to dry erythematous, slightly elevated squamous plaques which may be rather well circumscribed, with normal skin between. Sometimes grouped papular lesions are seen. The dry, patchy eczematous eruptions may persist from six weeks to six months even after the patient is removed from contact with the material. There is a strong tendency for the condition to become chronic, to relapse and recur, and to simulate constitutional patterns of eczema such as nummular, seborrheic, and hypostatic eczema. Tolerance apparently does not increase on further exposure to chromate. In fact, with subsequent exposure, each attack seems more severe and prolonged.^{1,9} It has been said that chromate is the major industrial allergen.⁸ It would appear that the hexavalent chromate ion is a common sensitizer, and that trivalent chromium compounds are less potent sensitizers. Metallic chromium is not a sensitizing substance.

Hall,⁹ in investigating a group of workers in the aircraft industry, found 202 cases of occupational dermatitis, 65.3% of which were due to ingredients of a zinc chromate primer paint. Of these, 68% were due to

the zinc chromate in the primer, 17% to one or more of the resin ingredients, and 15% to both. The zinc chromate primer was used to coat all metal sheets and parts in the plant. It was reported that all workers who applied or removed the primer or who cut, filed, drilled or otherwise worked with the metal were exposed to an occupational hazard. Even bystanders, such as janitors sweeping up the shavings, and inspectors and tool repair workers, were sufficiently exposed to become sensitized. The patch test was found to be of a high order of reliability.⁹

Similarly, 65 out of 250 workers in an automobile plant in England who were engaged in wet sandpapering a primer paint developed contact dermatitis. The primer paint contained zinc chromate. When this substance was removed from the paint, no new cases of dermatitis occurred.¹⁰

In cases of contact dermatitis due to chromium, a dermal delayed or tuberculin-type sensitivity has been demonstrated. Some subjects react to intradermal injections of the metal but do not react to patch tests, indicating that some cases of contact dermatitis are based solely on dermal delayed sensitivity.¹¹ Using intracutaneous tests, it has been shown that a person allergic to hexavalent chromium (potassium dichromate) is regularly allergic also to trivalent chromium (chromium trichloride). Patch tests are not invariably positive with these compounds. Basophil leukocytes are increased in the inflammatory exudate.¹² Determination of the relative number of basophils in a patch test reaction after application of cantharidine to the reaction appears to be of value in differentiating allergic from primary irritant dermatitis.¹³

Experimental production of circulating antibodies to chromium was carried out by Cohen,¹⁴ who demonstrated by passive hemagglutination reactions that the sera of rabbits given intravenous injections of human group "O" erythrocytes sensitized with either potassium bichromate or chromium chloride contained antibodies only to trivalent chromium. The sera of rabbits injected

with the same chromium salts plus Freund adjuvants did not contain antibodies to chromium. Circulating antibodies against trivalent chromium have also been demonstrated in guinea pigs sensitized with potassium dichromate and Freund adjuvant.¹⁵

Samitz^{16,17} has investigated the binding of chromium to skin by chemical and radioactive tracer methods. These studies indicate a chemical reduction of the hexavalent species to the trivalent state before binding.

In patch testing for contact dermatitis and to avoid direct irritative effects, a 2% solution of chromium sulfate and a concentration of 0.5% to 1.0% potassium bichromate have been recommended.^{6,18}

Gougerot and Delay¹⁹ reported a case of dermatitis due to chromium in which skin testing with chromic acid solution provoked a flare-up of the eczematous lesions at a distance from and at the same sites of the spontaneous eruption. This reaction was associated with a reduction in leukocytes and in arterial tension.

Apparently dermatitis may be precipitated by the inhalation of chromium compounds as well as by contact. One patient experienced an explosive vesicular flare-up of a chronic eczematous eruption of both hands after inhaling fumes from an acetylene welding operation. He showed a strongly positive reaction to 0.25 potassium bichromate in a closed 48-hour patch test. Numerous other patch tests were negative. Welding fumes are known to contain chromium, and some welding rods contain as much as 18% chromium.²⁰ Another welder had urticaria and asthma while engaged in pre-heat welding with a railroad rod and acetylene torch. The railroad rod contained chromium (0.9%—1.25%).²¹

Upper Respiratory Tract Lesions

Ulceration and perforation of the nasal septum have long been recognized as an occupational hazard in workers exposed to fumes, mists, and dusts of chromium compounds. Workers in chromate production are subject to chrome ulcers, dermatitis, rhinitis, and perforation of the nasal septum.^{6,22-24} Also reported is involvement of the pharynx,

larynx and sinuses, and formation of nasal polyps.^{24,25} Multiple small ulcerations of the buccal cavity, tonsils, and pharynx have been observed.^{3,23}

Ulceration and perforation of the nasal septum have been seen frequently in workers in the chromium-plating industry. Dixon²⁶ found 18 cases of nasal perforation in a poorly ventilated chromium-plating plant, but did not encounter this entity in a plant with adequate ventilation. Five other workers showed ulceration but not perforation of the nasal septum, and two workers seemed relatively immune. The lesions were painless and limited to the cartilage. Symptoms included sneezing, burning of the nose, nosebleed, blocking and crusting of the nasal passages, and a peculiar whistling sound from the nose. It was postulated that the fine particles were deposited on the mucous membranes from the mist or spray as well as from picking of the nose. Other workers²⁷⁻³¹ have described chrome ulcers of the skin and ulceration and perforation of the nasal septum as hazards incurred in the chromium-plating industry.

Vomiting has been reported as a rare symptom, always in association with dermatitis.^{29,30} Conjunctivitis has also been mentioned as occurring in these workers.³⁰ Bloomfield and Blum,²⁸ in examining 23 workers from six chromium-plating plants, found 16% of those employed in the plating rooms had perforation of the nasal septum, 21% had ulcerated septums, and all but two showed some nasal inflammation. Forty-three percent had chrome holes.²⁸ Adequate ventilation has been emphasized as a means of preventing these lesions.^{1,3,28,32}

Anodizing is another electrolytic type of anticorrosive metal treatment which employs a bath of 5% to 10% chromic acid. The recommended threshold limit for chromic acid and chromates (as CrO_3) is 0.1 mg per cubic meter of air.²

Chromium Compounds and Neoplasia

Hueper³ reports that the first instance of carcinoma of the respiratory tract in a chromate worker was recorded by Newman, in Scotland, in 1890. A 47-year-old man em-

ployed for 20 years in a chromate plant had a large adenocarcinoma from the nares and a characteristic perforation of the nasal septum.³

The first cases of lung cancer from German chromate plants were reported in the early part of this century, and by 1936, twenty-five cases of pulmonary carcinoma among chromate workers had been recorded. The early papers contained no definite proof that the incidence of lung cancer was higher in the chromate-producing industries or that chromates alone were responsible for such cases since some of the workers were exposed to other substances. These cases have been reviewed in detail by Hueper³ and by Baetjer.³³

Machle and Gregorius³¹ studied cancer of the respiratory system in seven chromate-producing plants in the United States. They found 21.8% of the deaths due to cancer of the respiratory system, or 16 times the expected ratio. The crude death rate was 25 times greater than normal. No abnormality in rates for cancer of other sites was found. Experience with one plant suggested monochromates as a cause. Nasal irritation and perforation did not seem necessarily to imply exposure to the kinds and quantities of chromium compounds capable of producing lung cancer.³⁴

Mancuso and Hueper³⁵ found the death rate from lung cancer in workers in a chromate plant to be 15 times that of the general population in that county. The geometric mean latent period was 10.6 years. These authors presented epidemiological, biochemical and histological evidence that insoluble chromium compounds such as chromite dust and chromic oxides may play a causal role in lung cancer. These compounds are retained over a long period of time in the lungs and may cause pneumoconiotic changes.

Baetjer³⁶ compared the incidence of pulmonary carcinoma in chromate workers with controls on the basis of hospital records in two Baltimore hospitals. Among the lung cancer patients, 11 had been exposed to chromium compounds, compared with none for the controls. The percentage of chromium workers in the lung cancer series was

significantly greater than the percentage of chromium workers in the employed male population of Baltimore.

In a study of the chromate producing industry in the United States done by the U. S. Public Health Service,³⁷ 897 males from six chromate-producing plants were medically examined. Ten cases of bronchogenic carcinoma were found, 8 of which were confirmed histologically. This gave a rate of 1,115 cases per 100,000, as compared with the rate of a control group of 20.8 per 100,000. A study was also made of the morbidity and mortality of male members of sick benefit associations in seven chromate-producing plants. It was found that there were nearly 29 times as many deaths from respiratory cancer among chromate workers as would be expected from the experience of all males in the United States.

The foregoing clinical observations have stimulated a great deal of experimental work in the attempt to produce tumors with chromium compounds in animals. In one study, no malignant tumors of the respiratory tract were produced in rabbits, guinea pigs, rats, or mice by inhalation or intratracheal injection of various chromium chemicals.³⁸ Malignant tumors have been produced in rats after the intrapleural or intramuscular implantation of calcium chromate.³⁹

Studies of lung tissue from men who worked in chromate-producing plants⁴⁰ indicated that the presence of lung cancer was not directly related to the concentration of soluble or insoluble chromium in the tissue. Both soluble and insoluble chromium was found in the lung tissue of men who had cancer many years after the end of their exposure. The soluble chromium was firmly bound by cellular tissue, insoluble in saline, acetone and dilute base, but readily soluble in concentrated acid.

In animal experiments, according to these authors, when water soluble sodium dichromate or potassium dichromate was injected intratracheally, it was removed rapidly from the lungs within a few days except for a small amount remaining at 140 days. Some chromium was excreted, some was distri-

buted to soft tissues, and a large part was taken up by erythrocytes. The chromium concentration in the spleen increased as the erythrocyte concentration decreased. It was also found that lung slices bound chromium to a greater extent and more rapidly in the form of chromic ions than in the form of chromate or dichromate ions. The reaction appeared to be at the surface of the lung slices and to reach a fixed end point. Part of the hexavalent chromium was reduced to the trivalent form when in contact with lung slices. Little if any chromium was found in the bones of men or animals, and little or no chromium was found in the bronchogenic carcinomas.⁴⁰

Effects of Chromium Compounds on the Lower Respiratory Tract

Asthma

In view of the known irritating and corrosive action of chromic acid and the chromates on the skin and mucous membranes of the upper respiratory tract, it is not surprising to find inflammatory lesions of the lower respiratory tract as well. Also, since these compounds are known sensitizers, it is not unexpected to find cases of bronchial asthma due to exposure by inhalation to fumes and dusts of these compounds. Sporadic reports of lower pulmonary irritative phenomena and cases of asthma have appeared in the literature, although the numbers are relatively meager as compared with the extensive literature on cutaneous manifestations and nasal lesions, and are apparently not as well known generally.

Lerza²⁵ described symptoms of bronchitis in several workers with alkaline bichromates which he had observed personally. He reviewed much of the foreign literature through 1957, which mentioned acute bronchopulmonary inflammation from chromium compounds on both an occupational and experimental basis as well as the previously reported cases of asthmatic syndrome in people working with chromium derivatives apparently due to hypersensitivity.

Lukanin⁴¹ reported the autopsy findings in a 29-year-old chromate worker who died accidentally after five years of occupational exposure. The findings included rather pro-

nounced emphysema, with thickening and tearing of the alveolar septa and the presence of blood in a few alveoli. Portions of the lung had been replaced by fibrous tissue and a scattering of dark brown pigment. There was also desquamation of the bronchial epithelium in layers. The overall picture bore some resemblance to that of silicosis. He also reported that animals exposed to the same environment as that of the chromate workers incurred disease of the bronchi and lungs. Changes in the mucosa and submucosa of the respiratory tract were also observed in guinea pigs that were kept over a chrome bath for periods of time daily up to 45 days.⁴²

In a study of chromate workers, one individual was observed who seemed to present a typical example of an acute chemical pneumonitis. Examination also revealed a perforation of the nasal septum.²⁴

Meyers⁴³ reported 2 cases of acute pulmonary complications following the inhalation of a chromic acid mist.

Pneumoconiotic changes in the lungs of 3 chromate workers were described by Mancuso and Hueper.³⁵ Chest films in these cases showed slight bilateral hilar enlargement. Bilateral hilar enlargement was also noted in the x-ray studies of chromate workers in the United States done by the Public Health Service,³⁷ but no significant x-ray evidence of pulmonary fibrosis was found.

Legge,²² in his article in Oliver's *Dangerous Trades* published in 1902, described the lesions seen in workers in the British chromate-producing industry and mentioned one case of asthma in a worker who had a family predisposition to the disease. He also quoted Delpech and Hillairet as believing that the action of the dust in the chromate producing industry produced bronchitis and asthma in some cases.

In 1931 Smith⁴⁴ reported the case of a 25-year-old white man with a previous history of asthma and hay fever who became acutely ill after his second exposure to ammonium bichromate. He developed skin lesions, asthma, nephritis with glycosuria, acute myositis, and fever. An intradermal injection of a 0.5% solution of the ammonium bichro-

mate produced a marked local reaction and reactions at distant skin sites previously exposed to chromium. It was postulated that absorption of the material probably took place through the skin.

Joules⁴⁵ reported the case of a 41-year-old metal plater who developed asthma and dermatitis. There was no family history of allergy. Two days after he shoveled chromic acid from a barrel he noted an eruption on the forearms, irritation of the scalp and back of the neck, watering of the eyes and nose, tightness of the chest, and dyspnea. He had another attack on resumption of his work. Physical examination revealed dermatitis of the hands and forearms and slight conjunctivitis. There was a shallow ulceration on the right side of the nasal septum. He had severe dyspnea and some cyanosis and the typical picture of asthma. The urine contained no traces of chromium. X-ray examination of the chest was completely normal except for some emphysema. A scratch test reaction to potassium bichromate was positive, a wheal developing in 48 hours. He was given 1/25 grain of this material intradermally and within one hour the following symptoms developed: a local reaction and irritation of the hands with reddening of the skin and running of the eyes and nose. After two hours he experienced tightness of the chest and severe typical asthma for 18 hours despite the administration of adrenalin. This was regarded as a case of specific allergic asthma due to chrome sensitization. Testing of the patient to group proteins was uniformly negative.

A case of asthma due to chromic acid fumes in a chromium-plating worker was reported by Bergmann.⁴⁶ The patient also had recurrent dermatitis which would increase in severity for several hours after an asthmatic attack. While the patient was hospitalized, a provocative test (inhalation of a sample of the heated chromium bath solution) produced an acute attack of asthma which responded to bronchodilator treatment in one hour. A second person who inhaled the same fumes for comparison had only minimal cough and a stinging feeling in the chest. The dermatitis could be pre-

precipitated with a trial application of chromic acid in a dilution of 1:20 and 1:50. Although the asthma and dermatitis appeared for the first time after the patient began working with the chromium bath, he continued to have repeated attacks of asthma despite the removal of chromic acid fumes from his environment, and eventually was totally unable to work.

Card⁴⁷ presented the case of a patient with no previous allergic history who also suffered from asthma related to exposure to the fumes of a chromium-plating factory after five months of exposure. The asthma rapidly cleared after one week's hospitalization. The symptoms recurred on return to work, but disappeared on re-admission to the hospital. An attack of asthma was provoked by injection of 0.0004 gm of potassium dichromate. A further attack was provoked by injection of 0.004 gm of potassium chromate. Except for a slight attack of asthma requiring no treatment, no asthmatic symptoms occurred while the patient was in the hospital other than those produced artificially. The patient had no reaction to the oral administration of chromium compounds and no skin reaction to ordinary protein groups. There were no further attacks of asthma after he obtained other employment.

Asthma due to the dust of chromite ore was reported in a chromate worker and also in some workers employed in construction of a new plant near a chromite ore dump.²⁴ A clinical trial in the chromate worker precipitated a severe attack of asthma which required adrenalin for relief.

Kaplan²¹ reported the case of a welder who exhibited urticaria and asthma while engaged in pre-heat welding with a railroad rod and acetylene torch. It was felt that this case was probably due to inhalation of gases or particulate matter originating from the contents of the acetylene tank, combustion products of commercial acetylene gas, and/or combustion products of pre-heat welding with a railroad rod. Analysis of the latter showed a chromium content of 0.9% to 1.25%.

Tolot and others⁴⁵ reported the case of a 58-year-old chromium plater who exhibited

generalized eczema and simultaneously acute asthmatic symptoms which rapidly progressed to the picture of chronic bronchitis with emphysema. Bronchoscopy revealed diffuse congestion of the entire right and left bronchial trees. The mucosa was hypertrophic, thickened, and edematous in areas, with much mucopurulent secretion. There was co-apting of the bronchial walls on expiration. Chest x-ray films showed hyperaeration and flattening of the diaphragms. An electrocardiogram indicated right axis deviation, and spirometric studies showed a prolonged expiratory phase with a decreased expiratory rate.

In this case both eczema and asthma were triggered by exposure to chrome in a hypersensitive individual, and, though the eczema was considered compensable, the asthma was not. The authors make the pertinent point that it is logical to assume that irritating or allergic products, when inhaled, may produce pathological changes in the respiratory tract as well as on the skin, and that regardless of how isolated these examples may be, it is desirable to report them in order that the problem may become more widely recognized and subsequently prevented.

Marechal⁴⁹ has reported 4 cases of asthma in association with exposure to chrome yellow spray painting. One patient manifested a chronic asthmatic syndrome despite removal from the environment. One patient had no further asthma after removal from exposure to the paint, but did frequently show symptoms of chronic bronchitis, especially in the winter. A third patient was a draftsman who noticed precipitation of asthmatic symptoms when he worked near a fog of yellow chrome paint from a nearby spray gun. It was found that in this patient asthmatic attacks could be produced at will by exposure to the paint, the severity of the attack corresponding to the extent of the exposure. Other workers noticed that use of the chrome yellow paint caused coughing and nasal irritation. A fourth patient had no recurrence of asthma after avoidance of exposure to the vapors. One of the patients had bloody sputum. Chest films were

negative in all cases. The author reviewed the various chrome pigments found in paint. Some of them, such as chromic sesquioxide (Cr_2O_3) or chrome green appear to be harmless. The yellow paints or so called "chrome" paints made from lead chromate and zinc chromate seem to be the primary offending agents.

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Arterial Injuries in a Community Hospital

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In a review of 2,471 arterial injuries sustained in World War II, DeBakey and Simeone¹ found only 81 documented attempts at suture repair. In only three of these cases was end-to-end anastomosis performed. Most of the cases were treated by proximal ligation of the artery, with an amputation rate of 48.9%.

Repair was performed on 269 patients during the Korean conflict, studied by Hughes.² The amputation rate was decreased to 13%.

Levitsky³ recently reported an amputation rate of 3.8% in Vietnam during 1966 and 1967. Vascular repair has been used with increasing frequency in military and civilian hospitals.

Clinical Material

From 1965 through 1968 twelve patients with major arterial injuries have been treated by members of the Surgical Staff at Southeastern General Hospital. Eleven of these were male; one, female. The youngest patient was aged 2, the oldest 41, with the other ten falling in the age group of 18 to 30 years. The group included 5 Caucasians, 5 Indians, and 2 Negroes.

As would be expected, most of these injuries were caused by high velocity missiles. Four were due to shotgun fire, and five to rifle or pistol fire, for a total of nine gunshot wounds. Three injuries were caused by automobile accidents.

The symptoms and signs exhibited by these patients varied, dependent on the vessel involved and the associated injuries. The majority of patients were in shock and were actively bleeding on arrival, while the remainder had noticeable hematomas. The classic P's (pallor, pain, pulselessness, pares-

thesis, and paralysis) were recorded in most instances. In 5 patients the extremity was noted to be cool. Pulses were present in 2 patients.

The femoral artery was involved in 6 of the cases, the axillary and brachial arteries in 2 each, and the carotid and popliteal arteries in 1 each.

In a majority of the cases (8) the adjacent vein was also injured. Major nerves, including the median, ulnar, femoral and sciatic nerves, and the brachial plexus, were frequently injured. As would be expected in this type of trauma, there was considerable loss of skin and muscle tissue in half of the cases. In addition, there were several fractures and various other injuries, including a dislocated hip, a ligamentous injury of the knee, and a hemo-pneumothorax.

Treatment

In 11 cases treatment was directed toward control of hemorrhage and shock and immediate repair. Delayed repair (after three days) was carried out in one case where signs and symptoms of arterial injury were not evident on admission. The technique of repair consisted of dissection and control of the artery proximal and distal to the injury. The distal artery was flushed with heparin-saline solution. The damaged area of the vessel was then excised and end-to-end anastomosis was performed in 5 cases. Vein grafts were utilized in 5 patients, while a Dacron graft was used in one and a Dacron patch in another. Suture material varied: silk was used in 5 cases, polyethylene in 5 cases, and Tycron in 2 cases.

Postoperative arteriograms were performed in 3 cases. Various other procedures were then carried out, dependent on the associated injuries. These included vein repair (3 cases), vein ligation (4 cases), debride-

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ment of skin and muscles (6 cases), reduction of fractures and dislocations, and repair of nerves (3 cases), tracheostomy, closed thoracotomy and stellate block. In several cases casts or splints were applied to immobilize fractures and reduce tension on the anastomosis.

Ancillary therapy included antibiotics in all patients and blood transfusions in 11. Six were given anticoagulants, usually heparin, for variable periods of time. A vasodilator was used in 1 case.

Postoperative complications related to the arterial injury included edema, bleeding, necrosis of muscles and skin, and gangrene of the extremity. Patients with nerve injury continued to exhibit evidence of this damage in the postoperative period. Delirium tremens developed in one man.

Secondary procedures were varied. Three patients underwent additional surgical exploration for control of bleeding or removal of clots. In one patient it was necessary to revise the anastomosis. Amputation was necessary in 2 patients, but in one the operation was done more than a year after the initial injury and for reasons other than failure of the vascular repair. Skin grafts were carried out in 5 patients, and rotation of a flap was necessary in 1. Secondary repair of the sciatic nerve was done in 1 case.

Results

Results of treatment of traumatized arteries was considered excellent in 9 cases, good in 1 case, and poor in the 2 cases which required amputation. Of course, results were influenced by the associated injuries, particularly the slow recovery of those with nerve injuries.

The first patient in this group sustained a gunshot wound of the right femoral artery and vein, causing extensive damage to skin and muscle. Primary repair consisted of a Dacron graft which thrombosed within 24 hours; the clot was evacuated in a second procedure. The treatment was successful for only a short period of time, however, and eventually a mid-thigh amputation was performed after multiple operations and a prolonged period of hospitalization.

The other patient who required an amputation was a young man who was admitted on the orthopedic service with dislocation of the right hip and a torn posterior cruciate ligament of the left knee. Circulatory injury was not evident on admission. He was seen in surgical consultation three days after admission because of an ischemic left foot and leg. Exploration at that time disclosed thrombosis of the popliteal artery with damage to the inner wall of the vessel. The damaged artery was resected and a venous graft was successful in restoring circulation to the foot: however, avascular necrosis of the anterior tibial muscle group subsequently developed and required debridement and drainage. This complication resulted in an immobile foot and ankle, and amputation through the ankle was later carried out. Even though circulation was re-established, the period of ischemia was apparently too great for the leg muscles.

The result was considered only fair in one case, because of prolonged edema of the upper extremity after application of a venous graft to the axillary artery. The patient had sustained a shotgun wound of the axilla which caused extensive damage to the brachial plexus, axillary vein, and hemothorax.

The remainder of the patients showed no evidence of impaired circulation in the involved part. The man with the carotid artery injury recovered sufficiently to go out and get shot again within six months.

The youngest patient in the group was of particular interest. This was a 2-year-old Negro child who was riding in an automobile that ran into a service station. Apparently a steel beam crashed through the roof and almost completely amputated her right thigh about 2 inches below the greater trochanter. The extremity was attached by a few muscles and a small segment of skin posteriorly, but there was complete division of the femur and the major vessels and nerves.

Our first inclination was to complete the amputation, but we decided to try to re-attach the extremity. The divided artery was reunited by end-to-end anastomosis after

irrigation of the distal segment with heparin-saline. The femoral vein was then anastomosed and the skin and muscles were debrided and repaired. A loose fragment of the femoral shaft was removed and a hip spica was applied. Postoperatively, considerable edema of the leg developed, but there was adequate circulation to the extremity. After several weeks the sciatic nerve was repaired. The patient continued to improve following this operation and achieved good union of the femur. The leg was about 2 inches shorter than the other at first, but after 12 months the discrepancy was only $\frac{1}{2}$ inch. She still has a slight foot drop, but is able to walk without assistance and is apparently leading a normal life.

Discussion

Our experience with the management of arterial injuries in a community hospital leads us to believe that prompt, precise repair of these vessels nearly always leads to satisfactory restoration of circulation to the involved part. It is essential that these injuries be recognized promptly by maintaining a high index of suspicion in cases of gunshot wounds, stab wounds, and blunt trauma in the popliteal and antecubital regions. If there is any question, arteriograms are valuable in determining the presence and extent of arterial injury, as emphasized recently by Freeark.⁴ These are particularly helpful in injuries involving arteries with no readily palpable pulse, in partially severed arteries where pulses may be palpable, and in patients with multiple injuries or circulatory collapse. Exploration has been advised in the presence of a penetrating wound near a major vessel, a history of excessive bleeding, or a bruit or asymmetry of pulses in the two extremities. Arteriograms in these instances may prevent unnecessary explorations.

Prompt, precise repair⁵ should be carried out, with preliminary control of the vessel proximally and distally. Contused ends of

several vessels should be excised, particularly when damaged by high velocity missiles. If the ends can be brought together without tension, end-to-end anastomosis is advisable. When the segment of a damaged artery is too long for anastomosis, it should be replaced by a reversed vein graft. Sometimes venous patch grafts are sufficient.

The distal artery should be irrigated with heparin-saline solution, and gentle manipulation with a Fogarty catheter may remove thrombi which would otherwise jeopardize the result. Arteriograms should be obtained after completion of the repair.

Postoperatively the patient should be observed at frequent intervals for changes in color, temperature, and capillary filling. Casts and bandages should be applied in a manner not to cause constriction and so that peripheral pulses can be felt. If pulses disappear, re-exploration should be done promptly unless it would jeopardize the patient's life.

Summary

Experience with the management of major arterial injuries in a community hospital is reviewed.

The importance of early recognition of these injuries, with the aid of arteriograms in questionable cases is emphasized.

It is concluded that prompt, precise repair of these vessels nearly always leads to satisfactory restoration of circulation to the involved part.

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Fatal Occlusion of a Coronary Ostium by a Ball Valve Embolus In Bacterial Endocarditis of the Aortic Valve

Report of a Case

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Complications of bacterial endocarditis on leaflets of cardiac valves are many and varied. Among these are fibrinous, sometimes septic emboli which break off of the valvular vegetations and lodge in distant organs as well as the myocardium itself.¹ Such embolisms may be associated with infarction and focal or extensive morphological and functional impairment of the involved organ. Focal embolic glomerulonephritis of obscure etiology, presumably involving hypersensitivity reactions, is another fairly frequent complication of bacterial endocarditis.²⁻⁴ Osler's nodes of the fingers and the hemorrhagic cutaneous lesions of the palms and soles, described by Janeway, are additional manifestations of embolic or hypersensitivity reactions in bacterial endocarditis. Extensive local erosion with destruction of the involved valves of the heart may lead to perforation of leaflets and functional impairment of valvular sufficiency. On occasion the local suppurative process, particularly when due to staphylococcal, pneumococcal, or gonococcal infection, may result in perforation of the interventricular septum or outer wall of the myocardium, commonly at the base of the heart around the aortic valve.⁵ Local suppurative destruction may also be responsible for rupture of chordae tendineae or papillary muscle of the mitral valve. Commonly, systemic sepsis or meningitis may also complicate bacterial endocarditis. Infrequently described,^{6,7} however, is the association of rupture of a leaflet of the aortic valve in bacterial endocarditis with fatal occlusion of a coronary artery by a pendular ball-valve fragment of the ruptured aortic leaflet.

Case Report

Clinical history

A 63-year-old man was admitted to the hospital be-

cause of periodic dizziness and progressive loss of weight for approximately eight months. Five years previously a diagnosis of mild diabetes mellitus was made. One week prior to hospitalization he experienced an episode of transient blindness in the left eye and several episodes of double vision and tinnitus.

On admission to the hospital the blood pressure was 110 systolic, 50 diastolic, pulse 80, and respiration 16/minute. Examination of the eyes disclosed no remarkable findings. The lungs were clear to auscultation and percussion. A grade 4 systolic murmur was heard at the apex and left sternal border of the heart. At this time no diastolic murmurs were heard. Neurological examination revealed no abnormalities.

Clinical laboratory values were as follows: hematocrit, 31%; white blood cell count (WBC), 8,900, with 66% mature polymorphonuclear cells and 24% bands; proteinuria (1 plus), and a few red and white blood cells per high power field; examination of the urinary sediment—SGOT, 7 units, SGPT, 14 units; blood urea nitrogen, 15 mg/100 ml. and a positive latex fixation test reaction (4 plus). In cultures of the blood, alpha Streptococcus was grown.

Because of suspected allergy to penicillin, the patient was desensitized with gradient doses of penicillin prior to receiving 20 million units per day intravenously and subcutaneously for four weeks. During this time a murmur of aortic insufficiency appeared and microscopic hematuria (10 red blood cells/high power field) increased. At the conclusion of therapy with penicillin, blood cultures were negative for bacterial growth. Chest roentgenograms indicated the development of pleural effusion and possible pneumonia in the left upper lobe of the lung. Congestive heart failure ensued, presumably in part as a result of the aortic insufficiency.

On the day preceeding death the patient became suddenly disoriented, diaphoretic, and hypotensive. An electrocardiogram revealed posterior diaphragmatic myocardial ischemia. Despite resuscitative measures the patient expired, presumably because of lodgement into a coronary artery of a thromboembolus from the vegetations of the bacterial endocarditis.

Postmortem findings

The symmetrically enlarged heart weighed 500 gm. The walls of both the left and right ventricular chambers were slightly hypertrophied. On all leaflets of the insufficient aortic valve were several fresh fibrinous and healed fibrous vegetations. A multilobulated, mixed firm and friable, gray-tan nodule measuring 1.5 x 1 cm was present on the remnants of the posterior portion of the extensively perforated right coronary leaflet (Fig. 1). Microscopically these vegetations con-

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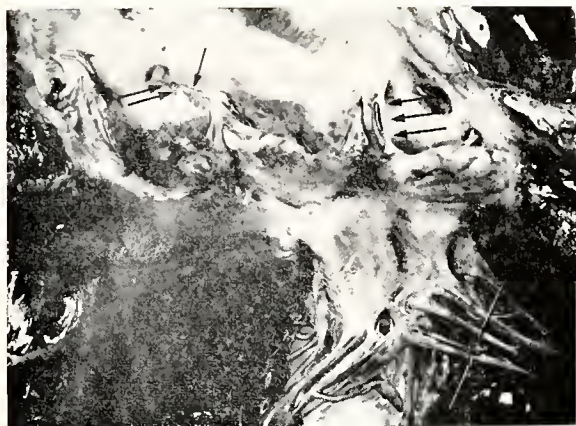


Fig. 1. Gross photograph of the aortic valve immediately after opening of the heart. The multiple dark friable and pale firm lesions of bacterial endocarditis associated with considerable destruction of the right coronary cusp can be seen. A tendinous cord (single arrow) attached to the posterior commissure of the right leaflet, extends and disappears into the ostium of the right coronary artery (double arrows). A fenestra and intact thickened marginal chord are present at the posterior commissure of left coronary cusp (triple arrows). There is opacification of the aortic leaflet of the mitral valve and its chordae tendineae. A single verrucal nodule is present on one of these cords (white and black arrows).

tained fibrin, calcium, fibroblasts, and many clusters of gram-positive cocci. No bacteria grew in cultures prepared from these vegetative lesions.

Erosion of the free margin of the right aortic leaflet ruptured a thin cord of the previous posterior rim of a commissural fenestra (Fig. 1). This freed cord lay across the sinus of Valsalva of this cusp, and its distal end was tightly lodged in the ostium of the right coronary artery (Fig. 1). Removal of the cord from the coronary ostium revealed a fibrous nodule measuring 5 mm in diameter attached to the end of the cord (Fig. 2). This pendular, ball-valve, organized "thrombus" had occluded the entire lumen of the right coronary artery. The remaining partially eroded leaflets of the aortic valve were covered or thickened by friable or firm, partially organized nodules. The left coronary ostium was patent. An intact tendinous cord, similar to the ruptured one described above, lay along the posterior commissural aspect of the left coronary aortic cusp (Figs. 1, 2). The posterior aspect of the aortic leaflet of the mitral valve and several of its tendinous cords were slightly thickened by opaque gray fibrous tissue. Adherent to the central portion of the line of closure of this leaflet and to several of the chordae tendineae were small, friable "verrucae" (Fig. 1).

Within the myocardium, at the base of the posterior interventricular septum, was a focally hemorrhagic gray-yellow patch, measuring 1 x 1.5 x 0.5 cm, of acute infarct. Microscopically, many other foci of acute myocardial necrosis and inflammation were



Fig. 2. Gross photograph of the aortic valve after removal of portions of the valve for histological and bacteriological examination. The cord and terminal nodule of the pendular ball valve have been manually extracted from the right coronary ostium (double arrows). The intact fenestral cord at the posterior commissure of the left coronary cusp can be seen (triple arrows).

seen in the posterior wall and apex of the left ventricle. The coronary arteries, though covered with intimal atheromata, were free of fibrin thrombi or significant luminal narrowing except for one site in the anterior descending coronary artery which was narrowed to 20% of its original lumen by an eccentric, calcified athero-arteriosclerotic plaque.

The spleen weighed 300 gm and contained a single, slightly retracted, subcapsular yellow infarct measuring 1 x 2 cm. In the cortex of each kidney were several retracted, gray, healed infarcts measuring 2 mm to 3 mm across. Microscopically, frequent focal glomerular fibrosis compatible with healing focal embolic glomerulonephritis was noted. A healing, pale brown, anemic infarct measuring 1 cm was located in the white matter of the under surface of the left occipital lobe of the brain.

Other pathological findings were focal interstitial pneumonia, acute congestion of the lungs and liver, multiple fractured ribs, and hemorrhage around the inferior vena cava, multiple bone marrow emboli in pulmonary arterioles, and chronic cholecystitis with cholelithiasis.

Discussion

This patient had chronic aortic bacterial endocarditis due to *Streptococcus viridans*, probably for as long as eight months. The clinical signs and symptoms of dizziness, tinnitus, diplopia, transient blindness and hematuria, as well as the pathological findings of healing focal embolic glomerulone-

phritis and healing or healed infarcts of the spleen, kidneys, and brain, substantiate the chronic nature of the valvular lesion. Prior to therapy with penicillin, *Str. viridans* was cultured from the blood, but after therapy and at autopsy, it was impossible to grow this organism from blood or the valvular vegetations. This was in spite of the use of penicillinase in the culture medium and the demonstration of bacteria in smears and histological sections of the aortic valvular lesions. The patient apparently was responding well to therapy, but the development of murmurs of aortic insufficiency, increasing hematuria, and finally acute coronary arterial occlusion were all compatible respectively with progressive perforation of the aortic leaflets, further embolization, and finally occlusion of the right coronary ostium. For approximately a day, extensive acute myocardial infarcts evolved, in part as a result of the complete occlusion of the right coronary artery at its origin, and in part because of compromise of alternative blood supply by marked athero-arteriosclerotic narrowing of the anterior descending coronary artery. Perhaps sudden occlusion of the right coronary ostium alone might not generally be fatal, but occurring in this patient, in the setting of aortic insufficiency, congestive heart failure, and sclerotic narrowing of a portion of the left coronary circulation, the right coronary arterial occlusion was fatal. Terminally, vigorous resuscitative measures resulted in fracture of several ribs, bone marrow emboli to the lungs, and hemorrhage around the inferior vena cava.

Besides the unusual finding of fatal pendular ball-valve occlusion of a coronary arterial ostium, this patient demonstrated several other features commonly encountered in bacterial endocarditis. These included valvular insufficiency due to destructive erosion and rupture of the valvular leaflets, focal embolic glomerulonephritis, multiple infarcts in parenchymatous organs, chronic history of vague symptoms leading to delay in adequate antimicrobial therapy, and the presence of rheumatoid-like factor in the serum. The appearance of rheumatoid factor and con-

glutinating serum proteins occurs so frequently in patients with bacterial endocarditis due to *Str. viridans* that serological measurement of these factors can often be used diagnostically.⁵

In the present case it is difficult to ascertain whether the bacterial endocarditis was established on a normal aortic valve or on previously diseased, scarred valve leaflets. The slight opacification of the aortic leaflet of the mitral valve and its chordae tendineae and the slight fibrous thickening of the remaining portions of the aortic valvular leaflets could have resulted from chronic inflammation associated with the prolonged course of local bacterial infection. It is quite possible that this patient could have escaped the fatal complication if he had not had the commissural fenestrae (Figs. 1 and 2) so commonly seen in aortic valvular leaflets. It was the freeing by inflammatory erosion of one end of the marginal chord of one of these fenestrae that led to the formation of the pendular ball valve occluding the right coronary ostium.

Summary

A case of bacterial endocarditis of the aortic valve is presented in which the patient died because of acute massive myocardial infarction due to pendular ball-valve occlusion of the right coronary ostium. The erosive and destructive suppurative process on the leaflets of the aortic valve led to rupture of the right leaflet and formation of a pendular structure which swept into and occluded the right coronary artery. This sudden occlusion of the right coronary ostium in the setting of aortic insufficiency, congestive heart failure, and marked atheroarteriosclerotic narrowing of the anterior descending branch of the left coronary artery was a fatal event. Associated findings of focal embolic glomerulonephritis, multiple infarcts of parenchymatous organs, and the presence of rheumatoid factor in this patient are discussed.

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Gonadal Dysgenesis

Review of the Literature and Report of a Case

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Turner's syndrome was first described in 1938.¹ It has since been variously designated as gonadal dysgenesis, gonadal dysplasia, ovarian agenesis, gonadal aplasia, ovarian dwarfism, status Bonnevie-Ulrich and primary ovarian insufficiency with decreased stature. Gonadal dysgenesis is now the preferred term.²

Gonadal dysgenesis, according to Grumbach, occurs in fewer than 1 in 2,500 births.³ It may occur in males as well as in females, and is then designated as male Turner's syndrome.⁴ Gonadal dysgenesis is about equal to male and female pseudohermaphroditism, and some feel it can be classified under true hermaphroditism.⁵

Typically the patient is of short stature—average 53 inches. Growth is normal till puberty, then the normal acceleration fails to occur. There are multiple congenital anomalies, including webbing of the neck, cubitus valgus and short middle phalanx of digit five,⁶ shield-like chest, irregular hairline, coarctation of the aorta, renal defects, and eye disorders such as internal strabismus, external squint, and posterior albinism.⁷ There is primary amenorrhea, scanty pubic hair, absence of breast development, and absence of axillary hair growth.

Etiology

The normal human cell has 56 chromosomes. Males have an XY chromosome complex; females an XX. In Turner's syndrome there are 45 chromosomes—44 autosomes and an XO chromosome.⁸ The accepted

etiology for the more common types of congenital anomaly is nondisjunction or unequal division of the chromosomes in the formation of the germ cells. In gonadal dysgenesis, nondisjunction is thought to occur in the father, permitting a sperm without a sex chromosome to unite with an oocyte; the resulting zygote bears only a single X chromosome.⁹ Up until the seventh week of gestation the primordia of the external and internal genitalia is identical in both male and female embryos. Which will eventually develop is dependent on the balance between the masculine and feminine controlling genes, which are distributed over all the autosomes except the terminal or XY pair. The sex controlling genes predominating on the autosomes determine the sex. If the cortex on the indifferent gonad develops, an ovary results; if the medulla develops, a testis results. All embryos tend toward feminization, and although testes are necessary for male development, ovaries are not essential for female development.⁷ So in gonadal dysgenesis female development occurs with only rudimentary gonads.

Diagnosis

A diagnosis of gonadal dysgenesis may be made at birth by examining a buccal smear, and also by the presence of pedal edema, which is the most significant finding in infants.⁹ The buccal smear is negative in 80% of cases.¹⁰ The Barr bodies of somatic cells, which are dependent on the presence of two X chromosomes, are absent in the cells of individuals with gonadal dysgenesis.¹¹ Although buccal smears are easier to obtain,

the sex is more prominent in the nuclei of vaginal smears.²

Occasionally patients with all the typical features of gonadal dysgenesis may have chromatin-positive buccal smears. The cardiac lesions vary in these cases. If the smears are chromatin-negative, coarctation or pulmonary stenosis may be present; if chromatin-positive, the most likely lesion will be pulmonary stenosis. Usually in the chromatin-positive cases, the stature is within normal limits or hypertelorism is present.¹² Fifty per cent of males with Turner's syndrome have cardiac defects; only 20% of females.¹⁰

It is impossible, of course, to examine every tissue in the body, but it is possible that a different chromatin pattern may be present in biopsy specimens of different body areas.¹³ The occurrence of two or more cell lines of differing chromosome number is called mosaicism.¹⁴ The different types may be found intimately mixed in one or several tissues.¹⁵ Mosaicism results from an error in cellular division after fertilization.

In gonadal dysgenesis there are three possible varieties of mosaicism—XO/XX, XO/XXX, and XO/XX/XXX.¹⁶ Chromosomal mosaicism was first discovered when an individual with Turner's syndrome was found to have a different chromatin pattern in biopsy specimens from skin in different areas of the body.¹⁵ Bahner and associates¹⁷ reported the case of a chromatin-negative woman who had normal secondary sex characteristics, regular menses, and at age of 31 gave birth to a normal son.

If the nuclear sex is negative, the diagnosis can be presumed to be established. If the nuclear sex is positive, the diagnosis cannot be established until the titer of urinary gonadotrophins rises to abnormally high levels. This usually doesn't occur until after ten years of age.¹⁸ The 17-ketosteroid values are usually normal. Estrogens are deficient. Surgical intervention is not essential to diagnosis.²

Treatment

Treatment consists of substitution therapy, which should not be started until epiphyseal maturation is nearly complete.¹⁹

Hamblin²⁰ recommends progesterone plus estrogen to prevent endometrial hyperplasia. He also recommends a cessation of therapy for three months out of each year. Treatment should be continued until the age of 40 to 50 years, and may be continued longer if desired. There are only a few patients with this condition over the age of 50. The oldest one reported is 63.²¹

Case Report

I first saw the patient on September 13, 1960, on referral by a psychiatrist. At that time she was 33 years of age. She was the youngest and the only girl in the family. Two brothers were living and well. One brother died in infancy.

She had attended college but failed to graduate in her senior year because she had gallbladder surgery. She dated only occasionally during her college days. She taught school for two years, and then changed to office work which she liked much better.

She had always felt she was different from other girls, because she had never developed physically and had never menstruated.

Physical examination revealed a short, stocky girl, 4 feet 7 inches tall and weighing 113 pounds. Her blood pressure was 122 systolic, 90 diastolic. She had no axillary hair and only scanty pubic hair. Her breasts were undeveloped. She had cubitus valgus. On pelvic examination the vagina was present, the cervix and a small uterus were palpable. No ovaries were felt on rectovaginal examination.

When I saw and examined the patient I felt sure she had gonadal dysgenesis. When the report on the buccal smear was telephoned to me from the laboratory the technician asked if I had made a mistake in giving a woman's name, because the smear indicated the patient to be a male. Because of the distinctive physical findings and the male chromatin pattern, no further laboratory work was done.

The patient was started on a regimen of stilbestrol, 1 mg daily for 21 days, and progesterone, 10 mg daily for the remaining week of the cycle. She responded well to therapy and had regular monthly withdrawal bleeding. Her breasts rounded and the vagina became succulent. After a year of combined therapy she was kept on estrogen alone. Her breasts continued to develop. She did not respond with a growth increment, however, because of her age at the beginning of therapy.

I see this patient only once a year now, for she lives in another state several hundred miles away. She is doing very well and is much better adjusted emotionally.

A recent letter from her psychiatrist stated: "It was my impression that her abnormal feeling, that of not being a woman like other women, had a great deal to do with her emotional condition. I feel that your helping her to menstruate has been largely responsible for her success in overcoming her emotional problems.

She is working every day and feeling very well. She is taking very little medication and probably will eventually be able to get along without any."

Summary

The literature on gonadal dysgenesis is reviewed and an additional case which was not diagnosed or treated until the patient reached the age of 33 is presented. It is urged that this syndrome be kept in mind and diagnosed at least by early in adolescence, so that treatment may be instituted before possible psychiatric problems arise.

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When the scurvy comes on by a long use of salted provisions, the proper medicine is a diet consisting chiefly of fresh vegetables; as oranges, apples, lemons, limes, tamarinds, water-crisses, scurvy-grass, brook-lime, etc. The use of these, with milk, pot-herbs, new-bread, and fresh beer or cyder, will seldom fail to remove a scurvy of this kind, if taken before it be too far advanced; but to have this effect, they must be persisted in for a considerable time.—William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Philadelphia, Richard Folwell, 1799, p. 279.

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DECEMBER, 1969

MR. SPEAKER

For sheer devotion and dedication of thought, time, and energy to the health care of the citizens of North Carolina and to his profession, the retiring Speaker of the House of Delegates has few peers. Donald Koonce, M.D., as Committeeman, Councilor, President, Speaker of the House and A.M.A. Delegate, has given of himself unsparingly to the cause of medicine. His interest in cancer was responsible for the early organization of a cancer clinic in his home town of Wilmington, and his long-time service on the Board of the North Carolina Division of the American Cancer Society led to his appoint-

ment by Governor Moore as chairman of a "Commission to study the Cause and Control of Cancer in North Carolina."

He initiated the Public Relations Conferences, which were replaced by the current Officer's Conference. He chaired the committee that directed a survey of society activities known as the "Edlund Report," which established the office of Executive Director and an Assistant Director for Public Relations. As Speaker of the House of Delegates, he inaugurated the Reference Committee System proven so effective in the conduct of the business of the Society.

Explosive of temperament, at times blunt to the point of abrasiveness, but with a balancing good humor, an open mind, and an innate dignity, Donald Koonce has exercised rare qualities of leadership during 21 years on the Executive Council and nine years as Speaker of the House of Delegates. He will continue to represent the Society to the A. M. A. House of Delegates.

J. S. R.

* * *

PREVENTING SUICIDE

As death rates from major diseases are lowered by medical advances, suicide has move upward on the list of causes of death from twentieth in 1920 to eighth in 1968—and third or fourth in some age groups.

Self-destruction has finally been recognized as a public health problem of the first magnitude, a perennial epidemic that kills more Americans than the combined total of tuberculosis, syphilis, meningitis, poliomyelitis, influenza, and bronchitis. It claims three times as many victims as homicide and half as many as traffic accidents.

Many potential suicidal persons have sought some kind of medical consultation in the three or four months preceding their overt suicidal behavior. Because this is true, it is imperative that family physicians become sensitive to the signs of an impending crisis. Just as the physician labors many years to train his sensitive ear to detect an early heart murmur, or spends many hours developing skillful fingers to feel a slightly enlarged spleen, the physician must learn to listen for the early and often muf-

fled or disguised cries for help. A well-trained, skillful physician should be able to identify a potential suicidal patient on a routine examination as easily as he can detect a faint murmur or an elusive spleen.

While the physician plays a key role in the management of the acute suicidal patient, the task of detecting a potential suicide and preventing it, falls to the public as a whole. Nearly a hundred community services for suicide prevention have been established across the country as part of comprehensive mental health plans for entire communities. Physicians must provide the leadership for the development of these programs.

To develop, through physician leadership, a coordinated approach to suicide prevention in North Carolina, the Ad Hoc Committee on Suicide Prevention was appointed from the Mental Health Committee of the Medical Society of the State of North Carolina. Readers are referred to the comprehensive article entitled "The Role of the Physician in Suicide Prevention" by Dr. Robert Garrard, chairman of the Ad Hoc Committee, which appears in this issue of the JOURNAL.

AD HOC COMMITTEE ON SUICIDE PREVENTION
COMMITTEE ON MENTAL HEALTH

WATCH OUT FOR WHARTON'S JELLY

While it may be true that cream cheese and jelly is good for your belly (especially if you want it to get bigger), Wharton's jelly is something else again. The time for concern about this natural package cushioning is when samples of cord blood are sent to the laboratory for help in the diagnosis

and treatment of erythroblastosis fetalis. Agglutination tests run on such samples may well give false positive reactions, an observation made by Wiener in 1943, yet often overlooked. While the cause is unknown, the interference can be eliminated by hyaluronidase, suggesting that it is related to the mucopolysaccharides present in the jelly. Much more practical than using hyaluronidase is to get the proper sample in the first place. A suspension of red cells made directly from capillary blood is often useful, though it can be contaminated with interfering substances too, possibly vernix material. Samples from the umbilical vein or artery are often the best, but when nothing is available but cord blood, repeated saline washes may free the cells of contaminants and allow their use.

Mollison¹ records general observations about the Wharton's jelly phenomenon, and the American Association of Blood Bank's excellent technical manual (to which several North Carolinians contributed) mentions interference with Coombs' testing.² Other sources do not mention the problem, however, and it often comes to one's attention for the first time in the middle of the night. The clinician can see to it that proper samples are collected and avoid the problem, or help the laboratory work out procedures to do so. Anything avoidable in connection with erythroblastosis troubles is certainly worth doing.

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There is no malady which parents are so apt to communicate to their offspring as the scrophula, for which reason, people ought to beware of marrying into families with this disease.—William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines*, etc., Philadelphia, Richard Folwell, p. 283.

Correspondence

MEDICAL SCHOLARSHIPS

To the Editor:

This letter is written in the interest of funding medical scholarships. Can you help me find 199 American physicians who have seen their own children achieve academic fulfillment and would now like to help the worthy children of their less fortunate neighbors become doctors?

I have established The Dr. and Mrs. Benjamin Lee Gordon Memorial Scholarship in the memory of my late parents. My mother, Mrs. Dorothy Gordon, was the greatest inspiration of my life. She died in 1955 at the age of 75. My father, Dr. Benjamin Lee Gordon, was not only a noted medical historian, author and ophthalmologist, but a father who was a rock of strength at all times. He died in 1965 at the age of 94.

The Dr. and Mrs. Benjamin Lee Gordon Memorial Scholarship is unique in various aspects. The Scholarship consists of \$5,000 which is awarded to one Atlantic County individual (male or female) on the basis of a combination of financial need and academic merit to enable the recipient to afford a complete medical education.

The Dr. and Mrs. Benjamin Lee Gordon Memorial Scholarship is an outright gift free of all strings and encumbrances. The \$5,000 is divided into four yearly stipends. The recipient undertakes no indebtedness and no repayment is permitted. The scope of his future practice remains entirely at his own discretion.

The Dr. and Mrs. Benjamin Lee Gordon Memorial Scholarship is awarded by the Scholarship Committee of the Atlantic County Medical Society and is administered by the Atlantic County Medical Society.

For a county medical society to be able to accept such scholarship gifts on a tax-deductible basis, it must form a special tax-exempt charitable corporation acceptable to the Internal Revenue Service. The Atlantic County Medical Society has graciously accomplished this by forming the Atlantic County Medical Society Scholarship Fund, Inc.

It is to be emphasized that county medical scholarships of the type under discussion in no way supersede the wonderful work being done by the AMA-EMF and other national organizations. They rather constitute an effort to round out the medical scholarship picture on a local level.

As an added bonus, such county medical scholarships could in a small but effective way tend to ameliorate the physician shortage in the area of the donor, although this, of course, is not of primary importance and no recipient would be asked to guarantee the geographic area of his practice. The primary effect would be secured by present physicians helping future physicians to the benefit of our total society.

I am seeking another 199 physicians in the United States, who have raised their own children but still are deriving excellent incomes from their practices, who would like to establish \$5,000 scholarships controlled by their county medical societies and thus help children of less fortunate area residents become physicians. It is understood that the awarding of such scholarships on a yearly basis would be contingent on the continuation of each donor's financial prosperity and his satisfaction with the fair way in which the awards are handled.

I would deem it an honor to award a "Certificate of Meritorious Service to the Future of Medicine in America," each personally inscribed and suitable for framing, to the first 199 physicians in the United States who may care to establish such scholarships in their local areas. The ultimate success of this venture would put the sum of one million unwasted physician-earned dollars where it would do the most good for the future medical needs of society.

Of course, *no money is to be sent to the undersigned*. A short note by an officer of the county medical society, written on official stationery, substantiating each \$5,000 donation would entitle the donor to his Certificate.

MAURICE B. GORDON, M.D.

Bulletin Board

NEW MEMBERS OF THE STATE SOCIETY

- James Alexander Maultsby, M.D., 610 Elmwood Dr., Greensboro, N. C. 27408
 Silas Bodie Coley, Jr., M.D., 909 Kenmore Road, Chapel Hill, N. C. 27514
 Timothy Harvey Smelzer, M.D., 16 William Circle, Chapel Hill, N. C. 27514
 James Walker Wilson, M.D., 2711 Oberlin Drive, Durham, N. C. 27704
 Robert Edward Dawson, M.D., 512 Simmons St., Durham, N. C. 27701
 William David Simpson, M.D., 110 Grover St., Shelby, N. C. 28150
 John Lauchlin Monroe, M.D., 341 Crestview Rd., Southern Pines, N. C. 28387
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 William Arthur Nevel, M.D., UNC School of Medicine, Dept. ObGyn, Chapel Hill, N. C. 27514

NEWS NOTES FROM THE

DUKE UNIVERSITY MEDICAL CENTER

Four School of Medicine graduates and a former house staff officer at Duke University Medical Center received the first Distinguished Alumni Awards presented by the Medical Center at a banquet in Durham last month.

The award ceremony was a part of Duke's fifth annual Medical Alumni Weekend.

Recipients were Dr. Raymond Delacy Adams of Harvard Medical School; Dr. Martin M. Cummings of the National Library of Medicine; Dr. George T. Harrell, Jr., of the Milton S. Hershey Medical Center at Pennsylvania State University; Dr. William H. Muller, Jr., of the University of Virginia Medical Center, and the late Dr. Paul W. Sanger of Charlotte.

Also included in the program was the presentation of a portrait of Dr. Barnes Woodhall, University chancellor pro tem and former associate provost for medical affairs, to the Medical Center.

The portrait, painted by Joseph Wallace King of Winston-Salem, will hang in the hospital amphitheater. It was commissioned by the Medical Alumni Association, the Medical Center and a group of Woodhall's former surgical residents.

The awards banquet followed a meeting of the Deryl

Hart Society. Hart was formerly chairman of the Department of Surgery at Duke and later president of the University. The society is made up of his former surgical residents.

Dr. John P. McGovern of Houston, Tex., outgoing president of the Duke Medical Alumni Association, presented award certificates to the outstanding alumni recipients.

* * *

Dr. William G. Anlyan, vice president for health affairs at Duke University, is the new chairman-elect of the Association of American Medical Colleges (AAMC).

Next year he will assume elective leadership of the AAMC, which is the organization mainly responsible for overseeing administrative and educational developments in American medical schools and teaching hospitals. The current chairman is Dr. Robert Howard, dean of medicine at the University of Minnesota.

Another Duke faculty member, Dr. Daniel C. Tosteson, chairman of the department of physiology and pharmacology, is the new chairman of the association's Council of Academic Societies.

Dr. Thomas D. Kinney, director of medical education at Duke, is a former chairman of that society and currently serves as its representative to the association's executive council.

The Council of Academic Societies is one of three whose members represent the major segments of medical education in this country. The combined membership of the three constitute the AAMC.

The other two are the Council of Teaching Hospitals and the Council of Deans. Anlyan served as chairman of the Council of Deans during the past year.

A graduate of the Yale School of Medicine, Anlyan has been affiliated with Duke since starting his internship in 1949. A professor of surgery, he was dean of the School of Medicine and associate provost until Duke's Board of Trustees named him vice president for health affairs earlier this year.

* * *

Seven east coast medical schools are being aided greatly in their search for compatible kidney donors and recipients through a new program established about three months ago.

Known as the Regional Cadaver Kidney Procurement Program, the project includes Duke, the Medical College of Virginia, the University of Maryland, the University of North Carolina, West Virginia University, Johns Hopkins University in Baltimore, and Emory University in Atlanta. Other hospitals and institutions such as the Veterans Administration Hospital in Durham and elsewhere also contribute to and benefit from the program.

The medical schools have pooled their resources, so that potential kidney recipients at any one center will have a better chance for a successful match when a kidney becomes available.

All potential recipients at each medical complex are tissue-typed to determine their genetic traits. This

gives a measure of the traits that would be required of a donor for a specific individual.

Records of each scheduled recipient are stored in a central computer network.

After a kidney is taken from a donor, it is preserved in ice and transported to one of the medical centers by either the Air National Guard, highway patrol, chartered plane, or private vehicle.

It has been difficult in the past for doctors to find a cadaveric donor compatible with a single recipient at any one medical center, but Duke doctors feel that when a kidney becomes available now, they should have no difficulty locating a good recipient among the 200 on file.

The exchange program, largely initiated by Duke, the Medical College of Virginia and Emory, now covers the southeast and it is anticipated the program will be expanded to other medical schools and hospitals.

Already some 15 other centers have expressed a strong interest in joining in the regional program, and some, such as the University of Florida and Bowman Gray School of Medicine in Winston-Salem, are training their laboratory personnel in the techniques used.

* * *

Dr. Raymond Massengill, Jr., director of medical speech pathology at Duke University Medical Center, has been elected to fellowship status in the American Speech and Hearing Association (ASHA).

Dr. Massengill, received the distinction at the association's annual convention in Chicago. Fellowship status is one of the two highest honors the association can bestow and has been awarded to only a few of the organization's 12,000 members. Massengill is the first to be named a fellow while residing in North Carolina.

In addition to his fellowship election, Massengill was elected to a three-year term on the Clinical Certification Committee of the ASHA. He presented two papers at the convention, one on swallowing and speech production in patients who have had their tongues removed due to cancer, and another on new and improved surgical techniques in cleft palate treatment.

Massengill was named to the American Men of Science, Physical and Biological Science Section, this year and to the Community Leaders of America. He also has served this year as chairman of the Speech Pathology Committee for the North Carolina Division of Vocational Rehabilitation.

* * *

The chairman of the Department of Radiology at Duke University Medical Center is the new president of the North Carolina Chapter of the American College of Radiology.

Dr. Richard G. Lester, at Duke since 1965, presided during the recent scientific and business sessions at the meeting at Mid Pines near Pinehurst. He will serve a one-year term.

Lester is a graduate of Princeton University and earned his M.D. degree from Columbia University's College of Physicians and Surgeons in 1948.

Dr. Jane G. Elchlepp, assistant dean for planning at Duke University Medical Center for the past three and one-half years, has been named to a post in the office of the University's Vice President for Health Affairs.

Dr. Elchlepp will be working with Vice President William G. Anlyan as an assistant to the vice president, for planning and analysis. She retains her title as associate professor of pathology.

In her new position, Dr. Elchlepp will plan, organize, direct, control and evaluate planning activities at the Medical Center and supervise design and use of future construction.

Dr. Elchlepp joined the Duke faculty in 1962 after earning her M. D. degree from the University of Chicago in 1955. A native of St. Louis, she also holds M.S. and Ph.D. degrees in zoology from the State University of Iowa.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

The University of North Carolina's Division of Physical Therapy has received a \$37,000 grant from the Department of Health, Education and Welfare for a special project, "Pediatrics in Physical Therapy Education."

As part of the grant, two 12-month fellowships are awarded to graduate physical therapists interested in contributing to pediatrics through teaching, research, consultative services, or directing clinical programs.

* * *

Cancer, the most mysterious of diseases and one of the most feared in this country, is the object of an intensive treatment program at North Carolina Memorial Hospital.

The Hospital opened the Division of Radiation Therapy in April, with the most modern and advanced equipment available for cancer treatment.

In addition to the cobalt treatment most hospitals offer, Memorial Hospital is providing treatment with a 25-million-volt betatron machine, the only such piece of equipment in the entire state. This double-barrelled machine can bombard the cancerous area with either high-energy x-rays or electrons.

The hospital has also recently acquired a simulator for Radiation Therapy. The machine is the only one of its degree of complexity in the state. The model obtained is the "most sophisticated, up-to-date one made," according to Dr. Gerald Hanks who heads the Division of Radiation Therapy.

The machine's purpose is to "more accurately plan and arrange our treatment fields before the patient is treated," he said. "I think it is essential to the highest quality of work."

* * *

The University of North Carolina School of Public Health Building has become a photographer's model.

The U. S. Public Health Service has picked a photograph of the School as the cover illustration for their

national advertising pamphlet on the "Public Health Trainee Program."

* * *

Dr. William J. Cromartie has been appointed associate dean for clinical sciences in the University of North Carolina School of Medicine and chief of staff of North Carolina Memorial Hospital, it was announced recently.

The announcement came from Dr. Isaac M. Taylor, dean of the Medical School, who made the appointment.

A specialist in infectious diseases, Dr. Cromartie is a professor of bacteriology and medicine.

* * *

The new Robbie Page Memorial Out-Patient Playroom in the ambulatory wing of North Carolina Memorial Hospital was dedicated recently.

The playroom is the third major construction project here supported by Sigma Sigma Sigma, a national social sorority and a member of the National Panhellenic Council.

* * *

Dr. Robert Smith has been named acting director of the Division of Research and Education in Community Medical Care in the UNC School of Medicine.

The announcement was made by Dr. Isaac M. Taylor, dean of the School of Medicine.

In his new position, Dr. Smith succeeds Dr. W. Reece Berryhill, dean emeritus of the medical school and a Sarah Graham Kenan Professor of Medicine, who has held the post since 1966.

* * *

Miss Christine Anne Leimone has joined the staff of the Dental Assistant Program at the School of Dentistry in Chapel Hill as a clinical instructor.

She is a 1962 graduate of the Dental Assistant Program and was formerly with the Departments of Orthodontics and Prosthodontics at the dental school.

* * *

Two members of the University of North Carolina School of Medicine's Department of Pediatrics were the guests on the fifth program of the educational television series entitled "Medical Report."

Dr. Floyd Denny, chairman of the department and Dr. Paul Glezen, associate professor, discussed "Battling the Flu Bug."

* * *

Dr. Page Hudson, chief medical examiner of North Carolina, and Dr. Arthur McBay, chief toxicologist, discussed the role of the medical examiner system on the fourth program of the education television series entitled "Medical Report."

* * *

Dr. Bert N. La Du, M.D., presented the fifth lecture in the weekly series "Genes of Mice and Men," sponsored by the University of North Carolina School of Medicine. His topic was "Hereditary Responses to Drugs."

Dr. La Du is chairman of the Department of Pharmacology at New York University. He is noted for his proof of the specific chemical nature of several hereditary disorders of man.

Dr. Lenard Herzenberg of Stanford University was the sixth speaker in the University of North Carolina Medical Sciences Lecture Series on "Genes of Mice and Men." He spoke on "Gene Control of Immunoglobulins."

Other lecturers in the series were Drs. Earl L. Green and Margaret C. Green.

* * *

Dr. Isaac M. Taylor has been appointed to a second five-year term as dean of the University of North Carolina School of Medicine.

The appointment was made by University Chancellor J. Carlyle Sitterson.

* * *

The new \$4.5 million Dental Education Building at the University of North Carolina School of Dentistry was dedicated Oct. 19.

The dedicatory address was delivered by Dr. William L. Hand, president-elect of the North Carolina Dental Society. Dr. Hand delivered the speech prepared by Dr. John C. Brauer, former dean of the UNC Dental School and the originally scheduled speaker, who was unable to attend because of illness.

Other speakers for the program included UNC Chancellor J. Carlyle Sitterson and dean of the school, Dr. James W. Bawden.

Among the guests at the ceremonies were Lt. Gov. H. Patrick Taylor; William C. Friday, president of the Consolidated University; Dr. Hubert A. McGuirl, past president of the American Dental Association; Dr. C. W. Poindexter, president of the N. C. Dental Society; Dr. G. Shuford Abernethy, president of the Dental Foundation of N. C.; and Dr. Leonard F. Benninger, director of the Bureau of Health Professions, Education and Manpower Training, National Institutes of Health.

* * *

The Department of Health, Education, and Welfare has awarded a \$16,427 grant to the University of North Carolina for continuation of research entitled "Mechanisms of Endotoxin Action."

The principle investigator for the program will be Dr. John C. Herion of the UNC School of Medicine's Department of Medicine.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY

Three appointments to the faculty of the Bowman Gray School of Medicine have been announced by Dr. Manson Meads, vice president for medical affairs and dean. They are Dr. L. David Waterbury, assistant professor of pharmacology; Dr. Yi-Chi Chang, instructor in pharmacology; and Dr. Thomas A. Lesh, instructor in physiology.

Waterbury received the B.S. degree from the University of Michigan and the Ph.D. degree from the University of Vermont. For the past two years he has been a member of the faculty of the Baylor University College of Medicine, where he was an assistant

professor of biochemistry and a staff member of the Institute for Lipid Research.

Chang, a native of China, came to this country in 1956. He holds the B.S. degree from Southeast Missouri State College and the M.S. and Ph.D. degrees from the University of Connecticut.

Lesh, who recently completed work in the cardiovascular training program at Bowman Gray, received the B.S. degree from Michigan State University and the Ph.D. degree from Indiana University School of Medicine.

* * *

Senior medical students at Bowman Gray are assisting the admissions committee in determining the members of the 1970 freshman class. Approximately 40 members of the senior class are involved on a voluntary basis in the admissions process.

The fourth-year students sit with the admissions committee during the twice-a-week meetings, when it decides which candidates will be offered positions in the freshman class. Although the medical students do not have a vote in the final decision, they participate in the discussion on each prospect and frequently influence the opinions of the faculty members on the committee.

One medical student is assigned to each candidate. They spend approximately one hour together, during which time they have lunch, tour the school and have an informal interview.

The medical student evaluates the candidate in academic, professional and social areas. Unlike the two faculty members who interview the candidate, the medical student does not have access to undergraduate records or to results of the candidate's Medical College Admissions Test.

* * *

Five staff members of the medical school's Division of Allied Health Programs have been appointed to faculty and administrative positions in the division. They are Miss Helen P. Voss, assistant professor and director of the program for nurse anesthetists; Mrs. Phyllis D. Newport, assistant professor and assistant director of the medical technology program; Mrs. Leroy Ward, senior instructor and assistant director of the radiological technology program; Mrs. Henry M. Masencup, instructor and director of the program in medical record administration; and Mrs. Clarence R. Breedin III, instructor and assistant director of the program in cytotechnology.

* * *

Dr. Robert H. Coombs, associate professor of sociology, has been elected for a two-year term as member-at-large on the Executive Committee of the National Council on Family Relations.

* * *

Dr. John T. Hayes, professor of orthopedics, recently was elected vice president of the North Carolina Orthopedic Association at its annual meeting in Asheville.

* * *

Dr. James F. Martin, professor of radiology, is serv-

ing on the Scientific Exhibits Committee for the 1970 annual meeting of the American Roentgen Ray Society.

* * *

Dr. Jesse H. Meredith, associate professor of surgery, has been appointed to a four-year term on the North Carolina State Board of Health.

* * *

Dr. Billy C. Bullock, assistant professor of laboratory animal medicine, recently presented two seminars to the biomedical faculty of the Massachusetts Institute of Technology. The seminars were on "Diseases of Laboratory Animals" and "Comparative Primate Atherosclerosis."

He also presented a paper on the "Use of Primates in Medical Research" at the Southern Veterinary Medical Association meeting in October at Hot Springs, Ark.

* * *

Dr. Richard L. Burt, professor and chairman of the Department of Obstetrics and Gynecology, recently presented a paper on "Observations on the Metabolic Effects of HPL" at the First Conference and workshop on the Human Placental Lactogen at the Johns Hopkins University School of Medicine.

He also presented a paper on "Fat, Carbohydrate and Insulin Changes Throughout Pregnancy" at the District V meeting of the American College of Obstetricians and Gynecologists in Niagara Falls, Ontario, Canada.

* * *

Dr. Robert W. Cowgill, professor of biochemistry, attended the symposium on Biological Molecules in Excited States in Harriman, N. Y. He was chairman of the section on "Excited Amino Acids." He also presented a seminar on "Chemical Modification of Aromatic Residues on Proteins" at Johns Hopkins University.

* * *

Dr. John P. Gusdon Jr., assistant professor of obstetrics and gynecology, presented a paper on "Naturally Occurring Antibody to Placental Lactogen in Human Pregnancy" at the District IV meeting of the American College of Obstetricians and Gynecologists held in Washington, D. C.

* * *

Two members of the Bowman Gray faculty presented instructional programs at the fall meeting of the Southeastern Chapter of the Society of Nuclear Medicine in Nashville, Tenn. Dr. C. Douglas Maynard, assistant professor of radiology, conducted a program on "The Nervous System," and Dr. Donald J. Pizzarello, associate professor of radiology, presented a program on "How Radiation Damages Cells." Six papers prepared at Bowman Gray were presented at the meeting.

* * *

Dr. William M. McKinney, assistant professor of neurology, served as chairman of the Neurology Section of the recent meeting of the American Institute of Ultrasonics in Winnipeg, Canada.

Dr. I Meschan, professor and chairman of the Department of Radiology, presented a paper at the Twelfth International Congress of Radiology in Tokyo, Japan, Oct. 6-12. The title of the paper was "Bronchopulmonary Dysplasia: The Similarity in Roentgen and Histopathologic Appearance Between Some Cases of Oxygen Toxicity Radiation Pneumonitis and Post-Cytotoxic Non-Specific Bronchopneumonia."

* * *

Dr. Richard T. Myers, professor and chairman of the Department of Surgery, presented a motion picture on "Hepatic Lobectomy" at the meeting of the Clinical Congress of the American College of Surgeons in San Francisco, Calif. The movie, prepared in collaboration with Dr. Timothy C. Pennell, assistant professor of surgery, was presented during the session on Spectacular Problems in Surgery.

* * *

Dr. R. Winston Roberts, professor of ophthalmology, participated in the Pan Pacific Surgical Congress Oct. 17-22 in Honolulu, Hawaii. He was the moderator for a panel on the "Need for Therapy in Glaucoma," and he presented a paper on the "Cataract Problem in Glaucoma."

* * *

Dr. Clark E. Vincent, professor of sociology and director of the Behavioral Sciences Center, led a roundtable discussion on the "Family and Generational Patterns of Illegitimacy" Oct. 24 at the annual meeting of the National Council on Family Relations in Washington, D. C.

SURGEON-IN-RESIDENCE PROGRAM

The Departments of Surgery at Bowman Gray School of Medicine, Duke University School of Medicine, and the University of North Carolina School of Medicine, in cooperation with the North Carolina Chapter of the American College of Surgeons, are pleased to announce the establishment of the position of Surgeon-in-Residence at each of the three institutions. These positions are offered as part of a program of continuing education for general surgeons and surgical specialists in North Carolina and adjoining states.

Under this program the visiting surgeon spends a period of one or more weeks in full-time active participation in departmental activities. He has available to him all of the facilities of the department: operating room, laboratories, rounds, conferences, and library. He will be in close daily association with both the senior staff and the house staff of the service of his choice. Appointments may be made with specific staff members both in the Department of Surgery and in other departments for discussion of any problems of particular interest to him. Every effort will be made to make the visiting surgeon welcome and to make his stay both pleasant and profitable.

Interested surgeons are invited to contact any of the following for more specific information:

Dr. Richard T. Myers, Bowman Gray School of Medicine, Winston-Salem

Dr. David C. Sabiston, Jr., Duke Medical Center, Durham

Dr. Colin G. Thomas, Jr., University of North Carolina School of Medicine, Chapel Hill

Dr. Richard H. Ames, 1018 Professional Village, Greensboro

NORTH CAROLINA HEART ASSOCIATION

Heart murmurs in children can be detected within two and one-half minutes by a non-medical person using a machine developed under a program administered by the North Carolina Heart Association in cooperation with the North Carolina Regional Medical Program.

The machine, a PhonoCardioScan, is the product of a two-year Heart Sounds Screening Program (HSSP) funded under a \$48,000 grant from NCRMP.

The Heart Sounds Screening Program will be implemented in the state during early January, 1970, in 12 Charlotte-Mecklenburg County Schools and in the Watauga, Avery, Mitchell and Yancey school systems for students in grades one through 12.

Project director of the program is Dr. Robert N. Headley of the Bowman Gray School of Medicine, long time member of the NCHA.

Also cooperating in the program are Bowman Gray, the Heart Association of Charlotte and Mecklenburg County, the Mecklenburg County Department of Public Health, the Blue Ridge Health Council, Inc., the North Carolina State Board of Health, and Charlotte Memorial Hospital.

Headley said Dr. James C. Parke, Jr. will serve as physician director for the Charlotte-Mecklenburg segment of the program and Dr. David L. Phillips will be physician director for the Watauga, Avery, Mitchell and Yancey area.

Normally a physician can determine whether a heart murmur signals an abnormality when he hears it through a stethoscope.

Although diagnosis must be made by a doctor, direct physician examination is no longer necessary for the initial detection of abnormal heart sounds.

PhonoCardioScan measures the quality and spacing of heart sounds through a miniature computer weighing 17 pounds programmed for the normal beat of a child's heart.

Picking up the sound through a microphone applied to four positions on the chest and electric leads fastened by suction cups to the chest and forearm, the machine indicates any abnormal sounds by means of a flashing light.

Those children found to have heartbeats varying from the norm will be examined and diagnosed by a physician and their parents will be notified of the abnormality with recommendations for extent of further treatment.

AMERICAN MEDICAL ASSOCIATION

The American Medical Association has established a close liaison with 14 professional organizations concerned with allied medical education. Their unified objective is to define the mutual responsibilities of each in determining the academic requisites for accreditation of educational programs.

The U. S. Office of Education and the National Commission on Accrediting are participants in the project to develop these principles for interprofessional cooperation, and medical specialty organizations are also being consulted.

When these principles are agreed upon by these agencies, the AMA Council on Medical Education will submit a statement of these policies to the AMA House of Delegates for its consideration and adoption.

To further this aim, a panel of consultants has already been formed. It consists of a representative of each of these 14 organizations, and each has been committed to providing all available information on his respective agency's concept of interorganizational responsibilities and views on academic standards. Their recommendations will be presented to the AMA Advisory Committee on Education for the Allied Health Professions and Services. In addition, it is hoped that the panel members will effect a two-way channel of communication between their organizations and the AMA Council on Medical Education.

THE COMMONWEALTH FUND

The Commonwealth Fund marked the beginning of its second half-century of service as an American philanthropic foundation recently by issuing its fifty-first Annual Report, which includes a strong statement affirming the responsibility of foundations to help meet the difficult, and often controversial, fundamental problems of society.

The Fund, founded in 1918 by Mrs. Stephen V. Harkness, has concentrated its attention and resources primarily in the areas of medical education and health affairs, and the text of the Report describes appropriations amounting to \$5,609,916 for the fiscal year ending June 30, 1969. This brings the foundation's 50-year appropriations total to \$ 56,255,807—more than \$24 million above its income in that same period.

Recently the Fund has sought to assist in the: (1) establishment of new university medical schools; (2) expansion of enrollments and improvement of the quality of education in existing medical schools; (3) efforts of medical faculties to develop new categories of allied health manpower needed to work with physicians in the care of patients; and (4) involvement of the modern university's full spectrum of academic competencies in meeting the problems of providing health care in this country.

Within the first group of grants described in this Report—in the section titled "The University and Health Affairs"—eight appropriations were made in support of programs that include a collaborative endeavor among five universities to engage a wide

range of non-medical disciplines in the study of health care, and in the education of a new type of clinical physician, who will be equipped to provide knowledgeable leadership for the improvement of medical practice at the community level:

Five universities in collaboration (Case Western Reserve, Duke, Johns Hopkins, McGill, and Stanford) received \$298,100.

UNITED STATES PHARMACOPEIA

The United States Pharmacopeial Convention has invited full-time graduate and undergraduate students of accredited pharmacy and medical schools throughout the country to prepare papers on the topic, "The U. S. P. Role in Improving Drug Therapy."

The U. S. P., announced that two awards will be presented: one for the best paper submitted by a pharmacy student and one for the best paper submitted by a medical student. The winners will each receive a award of \$250 and an expense-paid trip to the U. S. P. C. Sesquicentennial Meeting in Washington, D. C., in April 1970.

Each pharmacy and medical school is being asked to select the two best papers submitted by students attending that school. The papers selected by each school will then be submitted to the U. S. P. C. for final selection. Only papers forwarded by the schools will be considered. Papers will be judged primarily on originality, practicality of ideas, clarity and organization of any proposals, composition, and adequacy of documentation.



Each Cough Calmer* contains the same active ingredients as a half-teaspoonful of Robitussin-DM†: Glyceril guaiacolate, 50 mg., Dextromethorphan hydrobromide, 7.5 mg. A. H. Robins Company, Richmond, Virginia 23220

A-H ROBINS

The Month in Washington

An American Medical Association spokesman outlined the AMA's voluntary national health insurance plan, "Medicredit," for consideration by the House Ways and Means Committee.

Dr. Russell B. Roth, speaker of the AMA's House of Delegates and a practicing physician in Erie, Pa., said the plan, which would be financed in part by federal income tax credits, is flexible and would assure all Americans—no matter how limited their financial resources—of adequate health care protection.

"Representing this country's physicians as we do," Dr. Roth said, "the AMA is on record in its belief that it is the basic right of every citizen to have available to him good health care.

"Today we want to put before this committee a plan which is universal in scope, voluntary in nature, and realistic in terms of total program cost."

He estimated the program would cost the federal government \$8 billion to \$9 billion a year, but about \$3 billion a year of that would be offset by liquidation of the Medicaid program. Medicare would continue.

"For those in low-income categories, this protection is theirs without expense or contribution on their part," Dr. Roth said. "For those with moderate and higher levels of income, Medicredit provides a system of cash incentives to enable them to protect themselves against major health care costs. . .

"It would give to persons who have purchased comprehensive health insurance the option of receiving a tax credit on their annual federal income tax return, a credit based on their tax liability. That is, a taxpayer could take as a credit against the amount of income tax owed to the federal government, all or part of their personal cost for comprehensive health coverage. Persons or families with a lower tax liability (usually reflecting lower income or more dependents and allowable expenses) would receive a greater tax credit. And those families in the lower 30% income range, would, without cost to them, receive a certificate enab-

ing them to purchase health coverage from qualified groups or plans."

The AMA plan calls for establishment of a "Health Insurance Advisory Board" to create Medicredit guidelines. It would be chaired by the Secretary of Health, Education, and Welfare and would include the Commissioner of Internal Revenue and public members. It would review the effectiveness of the program and file annual reports with the President and the Congress.

Dr. Roth stressed the importance of utilizing private insurance carriers, this taking maximum advantage of private sector competition to help hold costs down.

Rep. Durward G. Hall, M.D. (R., Mo.), a former member of the AMA House of Delegates, submitted to the committee another national health insurance plan. The first part of his two-part plan calls for the federal government to furnish persons eligible for Medicaid with health insurance certificates covering certain specified basic health protection. The states would have the responsibility for the balance of health care for an eligible individual after his basic coverage had been exhausted. Thus, the Hall plan would replace Medicaid.

The second part of the Hall proposal calls for the federal government helping, in cases of catastrophic illness, those persons who can afford normal health care insurance only.

Other national health insurance plans are being sponsored by Walter Reuther, head of the automobile workers' union; the AFL-CIO; Sen. Jacob K. Javits (R., N. Y.), and Gov. Nelson Rockefeller of New York. Indications are that the committee will not give serious consideration to such legislation before next year at the earliest. However, it appears probable that the issue will come to a vote in Congress before the 1972 elections.

* * *

The AMA also submitted to the Ways and Means Committee a statement on the Nixon Administration's "Health Cost Effectiveness Amendments of 1969" legislation.

The AMA commended the Department of Health, Education, and Welfare for its ef-

forts to curtail the rising costs of Medicaid and Medicare, but said that the Association believes "there are better and more appropriate means of meeting this problem.

As for the provision prohibiting payment to physicians who have committed fraud, overcharged, or otherwise abused the Medicare program, the AMA said:

"It should be kept in mind that there presently exist remedies to reach the cases of abuse which may exist—certainly the cases of extreme abuses which HEW has asserted these proposed penalties are intended to reach. While it is true that the law does not provide authority to disqualify physicians as to prospective participation, a carrier may reject or review a physician's claims on an individual basis as each claim is presented.

"The apparent concern of the Congress regarding alleged abuses and increasing program costs may require some changes in the administration of federally financed health care programs. However, the proposed amendments appear to introduce more severe remedies than the problems require."

As for the provision that utilization review committees pass retroactively on the medical necessity of admission of medicare patients to hospitals, the AMA said:

"At the present time a utilization review plan of an institution must provide for review, on a sample basis or other basis, of admissions, duration of stays, and services furnished, but must provide for review of each case of extended stay and also determine medical necessity of further stay. The law provides for three additional days of benefit payments after a negative finding and notification.

"Where a finding has been made that the admission was unnecessary, no payment would be made. Thus the denial of payment would be retroactive to the date of admissions. The three-day grace period is removed from existing law.

"The AMA previously objected to initial certification of the need for admission to a hospital, and this initial certification requirement was removed from the law. Under this bill the utilization review committee would

be required to review the attending physician's judgment as to the need for hospitalization. The present requirement of the committee under medicare is to review extended stay cases to determine need for further stay; thus it does not review a great number of cases of hospitalization where the patient is discharged earlier. Requiring committees to review all cases of hospitalization would impose a tremendous burden on the committee, and create additional heavy demands on physicians' productive manhours.

"An adverse finding by a committee would subject the patient to individual liability for hospital charges. As a result, this provision could act as a restraint on patients receiving care, particularly in those cases where a physician recognizes the possibility of differing medical judgments concerning the admission."

* * *

The American Medical Association supported legislation to require foreign medical graduates trained in this country to spend two years of residence in their native land or land of previous residence before becoming eligible to apply for U. S. citizenship.

C. H. William Ruhe, M.D., director of the AMA's Division of Medical Education, said the measure would strengthen the Exchange Visitor Program. However, Dr. Ruhe suggested that the provision be strengthened to require that citizens of less-developed nations return to their home countries rather than their latest nation of residence. He cited the example of citizens of India who come to the United States from England.

"If such participants are required merely to return to England there will be no alleviation of the brain drain from India," he told the House Judiciary Subcommittee on Immigration.

* * *

The HEW Department's Children's Bureau was broken into separate health and welfare units.

Under the reorganization:

Health programs administered by the Children's Bureau were transferred to the Health Services and Mental Health Ad-

ministration (HSMHA) where they will form a new organizational unit. Programs included are for maternal and child health services, crippled children, maternity and infant care, and health of school and preschool children.

The Children's Bureau as such goes from the Social and Rehabilitation Service to the Office of the HEW Secretary, where it becomes part of the new Office of Child Development. The Bureau will maintain its role of leadership and coordination of child and parent programs throughout the Department. It will also continue to investigate and report on all matters pertaining to the welfare of children.

Community services administration is established in the Social and Rehabilitation Service to consolidate the administration of social service programs for children and adults. These include programs located previously in the Children's Bureau and in other agencies of the Social and Rehabilitation Service.

HEW Secretary Robert Finch said that maternal and child health programs will be strengthened by their placement in HSMHA. "All of the health programs administered by HSMHA should benefit from this new and closer relationship," the Secretary said.

New Pamphlet Offers Guidance On How To Talk With Teen-Agers

As a parent, do you mean and do what you say? Do you stand *by*, rather than *over*, your teen-age son or daughter—helping to work out reasonable rules for behavior? Are you interested in your teenager's activities and friends, while respecting his need for privacy of thought, his desire for independence and individuality?

If your answers are yes, and if you know how to listen and to encourage expression of feelings, you stand a good chance of bridging the generation gap.

This is some of the guidance offered to parents by Millard J. Bienvenu, Sr. in "Parent—Teen-Ager Communication: Bridging the Generation Gap," a new Public Affairs Pamphlet. Dr. Bienvenu is head of the Department of Sociology at Northwestern State College of Louisiana and author of several other Public Affairs Pamphlets. Parent—Teen-Ager Communication is available for 25 cents from the Public Affairs Committee, 381 Park Avenue South, New York, N. Y. 10016.

Book Reviews

Insect Allergy: Allergic and Toxic Reactions to Insects and Other Arthropods. By Claude A. Frazier. 493 pages. Price, \$24.50. St. Louis: Warren A. Green Inc., 1969.

Asheville's Dr. Claude Frazier is well known locally and nationally for his interest in insect allergy, and his exhibits have been widely recognized, including a medal at our state meeting in 1968. Now Dr. Frazier has produced a book on the subject, which combines entomology and medicine, to serve as a reference for all physicians who see patients with insect troubles.

The book is the work of a new publisher who is carving a place for himself in a competitive field, and by and large the production is good. The 165 figures are in black and white and their quality is excellent. There is some redundancy, however—for example, pictures of honey bees leaving their stingers in their victim appear on pages 32, 58, and 98, when once would have been enough for all concerned. Most of the illustrations are compiled from a variety of sources; hence there is a bit of unevenness, which is to be expected.

The text is brief, usually having more to say on entomology than on medicine, which is not surprising, since treatment is more restricted than the natural history of these interesting forms of life. The physician gets many questions about insects, and patients expect him to be something of an entomologist. Thus the information is useful to have about, and thus far has not been available in so complete a form in a single volume.

There are a few points at which one would like to know what Dr. Frazier really thinks: for instance, if cockroach effluvia really have much importance in the origin of presumably allergic illness—but he is non-committal.

Like his exhibits, the book should do well by both Dr. Frazier and the profession, and we look forward to future editions.

* * *

The Old Person In Your Home. By William D. Poe. M. D. 180 pages. Price, \$5.95. New York: Charles Scribner & Sons, 1969.

The often neglected generation, the elderly, are championed by Dr. William Poe (a UNC faculty member and a Bowman Gray graduate) who sounds a compassionate plea for understanding. Though some one-sentence disease descriptions are inadequate the lay person is given a practical guide to the older person's medical care and emotional rehabilitation. Suggestive hints on how to improve doctor-patient relationship are particularly worthy. The appendix, with lists of supportive agencies and their addresses, is to be recommended.

For any layman who cares for the old person at home or in an institution, this book fills a need for concern.

In Memoriam

Charles Rose Mills, M.D.

Charles Rose Mills, M.D. died August 22, 1969, just 17 days short of his 58th birthday of September 8, 1910. His was the best of all deaths—"The unexpected and in his harness."

Dr. Mills was a native of Braddock, Pennsylvania. He received his M.D. degree from the University of Pittsburgh in 1936. He had his specialty training in ophthalmology at the University of Pennsylvania and came to Greensboro to practice in 1938. He served his country for four years in World War II as a medical officer in the European theater.

He was the first physician to practice ophthalmology exclusively in Guilford County, and one of the first in the State. To his everlasting credit it was known by his colleagues that he would not let pecuniary gains influence his judgment and prescribe glasses when not needed. His colleagues attest to the excellence of his judgment and technical skill in eye surgery. It did not go unnoticed or unappreciated that in his last years he did no surgery because he felt that he could not maintain that degree of excellence he demanded of himself.

Those who knew him casually considered him shy and retiring. Those of us who had been the brunt of his many practical jokes knew him to be otherwise. He was a star athlete on the Alleghany College basketball team. He shot golf in the low 70's and when he could no longer excel in golf, he gave it up and started fishing, and no one had more patience or perseverance in chasing that elusive creature.

Chuck was a member of the Guilford County Medical Society, North Carolina State Medical Society, and the American Medical Association since 1938. He leaves a lovely wife, two beautiful daughters, a worthy son, four grandchildren, and a host of friends, both professional and lay. "The noble acts which he did are not written, but they were very many."

Resolved, that a copy of this tribute be placed in the minutes of this Society, a copy sent to the widow, and a copy sent to the editor of the North Carolina Medical Journal.

Guilford County Medical Society
Wayne J. Benton, M.D.

Winthrop's Neo-syneprine Line Not Affected

By Proposed FDA Ban On Compounds

Referring to the Food and Drug Administration's proposal to remove from the market about eight drug manufacturers' nasal decongestant products containing sulfa components, Winthrop Laboratories' president Dr. Theodore G. Klumpp, one of the companies involved, stated today that "only our sulfathiazole product containing Neo-Syneprine, which represents less than one-tenth of one per cent of total Neo-Syneprine sales, is involved in the FDA action.

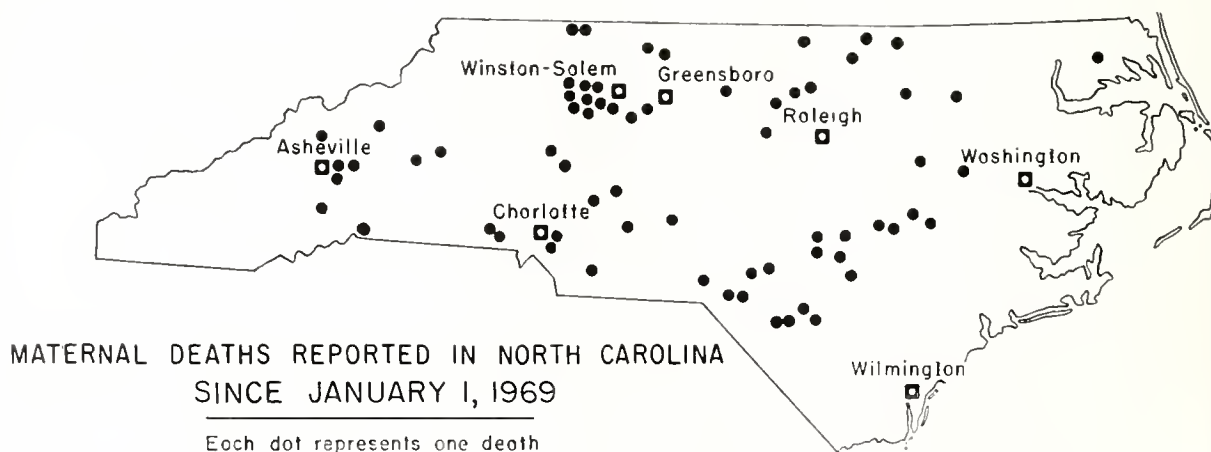
None of the other products in the long-established Neo-Syneprine line is affected by the FDA proposal.

Winthrop stopped promoting the sulfathiazole preparation containing Neo-Syneprine about 15 years ago. "However, we have been supplying it since then to those physicians who still want it," Dr. Klumpp said.

Pamphlet Offers Advice to Asthma Sufferers

Each of the six million asthma victims in the United States has a unique combination of body chemistry, physical sensitivities, and emotions with which to challenge his doctor. Fortunately, medical science is having increasing success in helping asthma patients live a normal life.

"Asthma—How to Live With It," by Ruth Carson, summarizes current knowledge about this disease and offers guidance on how to treat and prevent attacks. This new Public Affairs Pamphlet is available for 25 cents from the Public Affairs Committee, 381 Park Avenue South, New York, N. Y. 10016.



MATERNAL DEATHS REPORTED IN NORTH CAROLINA
SINCE JANUARY 1, 1969

Each dot represents one death

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Monthly Perinatal Mortality Report

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹: NORTH CAROLINA,
SEPTEMBER 1969 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE					NONWHITE					COUNTY	WHITE					NONWHITE					
	Perinatal Deaths		Total Deliveries Oct. 1968 - Sept. 1969	Perinatal Rate Per 1,000 Deliveries	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries Oct. 1968 - Sept. 1969	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries Oct. 1968 - Sept. 1969	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries Oct. 1968 - Sept. 1969	Perinatal Rate Per 1,000 Deliveries					
	September 1969	October 1968 - September 1969				September 1969	October 1968 - September 1969			September 1969				October 1968 - September 1969	September 1969			October 1968 - September 1969				
NORTH CAROLINA	151	1865	66964	27.9	132	1347	27756	48.1														
ALAMANCE	1	36	1343	26.8	2	22	442	49.8	PENDER		8	134	59.7		6	137	43.1					
ALEXANDER		12	300	40.0		3	35	-	PERQUIMANS			52	-		1	50	-					
ALLEGHANY	1	5	132	37.9			2	-	PERSON	2	9	263	34.2		9	195	46.1					
ANSON		6	158	38.0		14	301	46.5	PITT	3	22	746	29.5	2	30	633	47.4					
ASHE		11	305	36.1			3	-	POLK		2	138	-		2	38	-					
AVERY		7	234	29.9			4	-	RANDOLPH	1	22	1223	18.0		6	155	38.7					
BEAUFORT	1	10	374	26.7	2	14	239	58.6	RICHMOND	4	19	483	39.3	2	16	290	55.2					
BERTIE		3	100	-		11	277	39.7	ROBESON	2	16	585	27.4	7	63	1386	45.5					
BLADEN		8	237	33.8		9	199	45.2	ROCKINGHAM	5	39	985	39.6	3	19	429	44.3					
BRUNSWICK	2	7	269	26.0	1	7	161	43.5	ROWAN	2	29	1112	26.1	1	17	313	54.3					
BUNCOMBE	7	66	2107	31.3	1	12	259	46.3	RUTHERFORD	3	20	747	26.8	1	10	145	69.0					
BURKE	2	32	996	32.1	1	4	83	-	SAMPSON		12	372	32.3	2	25	343	72.9					
CABARRUS	2	30	1032	29.1	1	14	279	50.2	SCOTLAND		11	295	37.3		13	272	47.8					
CALDWELL	5	39	1106	35.3	1	5	91	-	STANLY		27	611	44.2		5	128	39.1					
CAMDEN		1	54	-			33	-	STOKES	1	11	283	38.9		1	46	-					
CARTERET		16	549	29.1		2	75	-	SURRY	2	32	905	35.4		2	5	63	-				
CASWELL		4	133	-	1	10	160	62.5	SWAIN		3	114	-		1	56	-					
CATAWBA	1	34	1520	22.4	2	10	212	47.2	TRANSYLVANIA		11	295	37.3	1	1	18	-					
CHATHAM		3	316	-		7	180	38.9	TYRRELL			32	-		2	28	-					
CHEROKEE	1	5	296	16.9		2	15	-	UNION	3	21	697	30.1		10	278	36.0					
CHOWAN			86	-	1	4	84	-	VANCE		9	325	27.7		2	23	390	59.0				
CLAY	3	5	81	-				-	WAKE	5	66	3045	21.7	9	67	1199	65.9					
CLEVELAND	3	26	961	27.1	2	24	437	54.9	WARREN		2	61	-		5	157	31.1					
COLUMBUS	2	14	513	27.3	10	314	37.8		WASHINGTON		5	120	-		11	169	65.8					
CRAVEN		28	1207	23.2	3	23	363	63.4	WAYNE		12	371	32.3			5	-					
CUMBERLAND	3	109	3635	30.0	4	58	1315	44.1	WILKES	4	24	1071	22.4	3	35	550	63.6					
CURRITUCK			56	-		2	36	-	WILSON	4	25	803	31.1			51	-					
DARE		1	116	-			12	-	YADKIN	5	14	533	26.3	7	27	572	47.2					
DAVIDSON	1	47	1442	28.6	10	250	40.0		YANCEY		10	348	28.7	1	2	34	-					
DAVIE		6	283	21.2	4	64	-				6	203	29.6			7	-					
DUPLIN		10	357	28.0	2	12	290	41.4	CITIES									City totals are also included in county totals				
DURHAM	3	30	1449	20.7	3	33	919	35.9	ALBEMARLE	4	4	167	-		2	45	-					
EDGECOMBE	1	9	437	20.6	3	27	538	50.2	ASHEVILLE	1	24	753	31.9	1	10	224	44.6					
FORSYTH	13	77	2733	28.2	5	65	1129	57.6	BURLINGTON		12	580	20.7	1	5	133	37.6					
FRANKLIN		5	187	26.7	1	16	252	63.5	CHAPEL HILL		5	316	25.8		5	48	-					
GASTON	5	67	2513	26.7	1	25	492	50.8	CHARLOTTE	7	78	3150	24.8	11	75	1886	39.8					
GATES			36	-	1	5	80	-	CONCORD	1	9	216	41.7	1	6	95	-					
GRAHAM		1	92	-			13	-	DURHAM	1	17	952	17.9	3	29	797	36.4					
GRANVILLE		5	216	23.1		16	346	46.2	EDEN		6	241	24.9		5	71	-					
GREENE		2	92	-	1	7	154	45.5	ELIZABETH CITY		2	166	-		4	90	-					
GUILFORD	10	107	3750	28.5	9	78	1585	49.2	FAYETTEVILLE		32	994	32.2	2	28	575	48.7					
HALIFAX		7	389	18.0	2	26	589	44.1	GASTONIA	5	24	841	28.5	1	11	203	54.2					
HARNETT	4	23	564	40.8	2	17	349	48.7	GOLDSBORO	1	9	314	28.7	1	19	256	74.1					
HAYWOOD	2	22	697	31.6		2	18	-	GREENSBORO	6	45	1770	25.4	3	40	929	43.1					
HENDERSON	1	26	704	36.9			43	-	GREENVILLE	3	13	330	39.1	1	7	194	36.1					
HERTFORD	3	5	123	40.7	2	20	242	82.6	HENDERSON		5	133	37.6	1	9	167	53.9					
HOKE		2	111	-		5	216	23.1	HICKORY		10	356	28.1		6	93	-					
HYDE		1	36	-	1	3	44	-	HIGH POINT	1	26	797	32.6	4	22	424	51.9					
IREDELL	2	32	925	34.6	1	21	305	68.9	JACKSONVILLE	1	8	409	19.6		2	49	-					
JACKSON		7	293	23.9		1	49	-	KINSTON	1	4	283	-		11	235	46.8					
JOHNSTON	3	28	765	36.6	1	17	316	53.8	LENOIR	1	5	203	24.6	1	2	50	-					
JONES	1	1	66	-		2	74	-	LEXINGTON		9	286	31.5		4	87	-					
LEE		4	398	-	2	8	166	48.2	LUMBERTON		2	223	-	1	13	195	66.7					
LENOIR	1	13	584	22.3	1	21	452	46.5	MONROE	1	5	135	37.0		5	65	-					
LINCOLN	1	15	530	28.3	2	6	93	-	NEW BERN		3	171	-		7	113	61.9					
MCDOWELL	1	21	532	39.5		1	33	-	RALEIGH	3	40	1597	25.0	4	41	599	68.4					
MACON	1	8	211	37.9		1	8	-	REIDSVILLE		7	163	42.9	1	4	105	-					
MADISON		6	230	26.1			2	-	ROANOKE RAPIDS		5	181	27.6		2	43	-					
MARTIN		8	195	41.0	4	20	261	76.6	ROCKY MOUNT E	1	1	101	16.3	1	11	152	85.4					
MECKLENBURG	8	115	4774	24.1	11	83	2187	38.0	ROCKY MOUNT N	1	4	226	-		10	94	-					
MITCHELL		3	214	-			2	-	SALISBURY		5	201	24.9	6	131	45.8						
MONTGOMERY	1	6	254	23.6		5	117	42.7	SANFORD		3	172	-		2	68	-					
MOORE	1	19	484	39.3	3	13	232	56.0	SHELBY		4	205	-	1	7	121	57.9					
NASH	1	11	535	20.6	1	24	500	48.0	STATESVILLE	1	10	260	38.5		8	128	62.5					
NEW HANOVER	2	32	1134	28.2	3	18	422	42.7	THOMASVILLE	1	11	184	59.8		4	101	-					
NORTHAMPTON			93	-	1	12	279	43.0	WILMINGTON		17	580	29.3	2	14	350	40.0					
ONSLow	2	52	2128	24.4	3	22	422	52.1	WILSDN	3	8	282	28.4	3	16	275	58.2					
ORANGE	1	18	870	20.7		10	235	42.6	WINSTON SALEM	10	35	1418	24.7	5	62	1070	57.9					
PAMLICO		2	76	-		4	61	-														
PASQUOTANK	2	7	294	23.8	1	8	179	44.7														

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Pinehurst, North Carolina

May 17-21, 1969

BRIEFED AND ABRIDGED BY JAMES T. BARNES
203 CAPITAL CLUB BUILDING, RALEIGH, N. C.



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Radiology: IRA E. BELL, M.D., 18 13th Avenue, N.E., Hickory 28601
Pathology: ARTHUR E. DAVIS, JR., M.D. Rex Hospital, Raleigh 27603
Anesthesiology: KENNETH D. HALL, M.D., Duke Univ. Med. Ctr., Box 3904, Durham 27706
Orthopaedics & Traumatology:
Dermatology: JOSEPH M. HITCH, M.D., 415 Professional Bldg., Raleigh 27601
Student AMA Chapters: MR. JAY D. COOK, Duke Univ. Med. School, Durham 27706

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA TRANSACTIONS

ONE HUNDRED FIFTEENTH ANNUAL SESSION
held at

Pinehurst, North Carolina

May 17-21, 1969

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REPORT OF CONSTITUTIONAL SECRETARY

The enrolled membership on December 1, 1968 was 3693. This represents an increase for the year of 23 members. The resumes of the meetings of the Executive Council in August, September and January are recorded in the Transactions.

Constitutional officers and executive officers were active in regional and national meetings. Each year increasing demands are made on the President, Constitutional and executive officers in committee work and in assignments related to medical care, medical education, changes in federal and state laws, and projects within the Society.

The increasing importance of private and government insurance programs have resulted in extensive work by the various committees of the Society.

The work of the Auxiliary will be seen by a review of the Auxiliary President's report in the Compilation.

The many hours of energy spent and ability exerted by committee chairmen and committee members in the various assignments during the year is commendable. Summaries of their work will be found in this volume.

An architect was selected and preliminary sketches have been made for the construction of our Headquarters facility. The leadership of the Society spent many hours visiting county societies throughout the State with regard to methods of financing the headquarters facility and also pointing out the need for such a facility. At a special called meeting of the House of Delegates on November 10, 1968, a method of financing the construction of a headquarters facility was voted on.

The Headquarters Office under the Executive Director, Mr. James Barnes, is fiscally sound, continues to function well and to render outstanding service to the membership of this Society.

Charles W. Styron, M.D., Secretary

ANNUAL REPORT OF EXECUTIVE DIRECTOR

Mr. Speaker, President Welton, Members of the House of Delegates, Members and friends of medicine, I wish this report could be a communication of assurance, anent all the efforts which have transpired during this twenty-second year in your service. While these years have yielded great personal satisfactions in service achievement, and many worthy tributes have come to one in this situation of dedication, there have been factors manifested of late which qualify any concept of assurance for the future. This is not a message of doom, but an expression of concern of one who surveys twenty-odd years of history, philosophy and action by an historic organization in professional pursuit of public good and service. There are factors which disturb. Maybe these are more on the horizon of viewing than in the realm of reality with which we are presently engaged and with which we toil. Suffice it to comment here that we commend to the leadership of medicine every where to "take stock" and

adjust the inventory to what may well be a new day for the profession and for the health care system as it has been known in the past. Surely rashness and irascibility will lend little to the solution of problems which confront this Society and, indeed, the profession on any front. In the months and years to come decisions must and will be made and we need to find the rationale by which decisions can be made in the atmosphere of calmness, reason and with no little of the aspect of love for our fellowmen manifested by leadership in the spiritual frame which has existed for so many centuries as exemplar to us. As a Society and as a cause we shall not survive from decision fraught with hate, jealousy, greed, militant endorsement nor forceful antipathy.

Many of you know of the "Valley" through which members of my family have been led the past year. Providence has had appeal—Providence has been kind—and there are blessings which are duly recognized and praised with thanksgiving! Deeper appreciation could not be expressed, than flow from me personally to every concern which has been rendered. Above all we thank God.

In retrospect, the actions of the Society this year have been extensive, more organized, more productive. As your Administrator, I have shared deeply in these three aspects and we know accomplishments are in line with these efforts. Withall, the honest approach and practical humility have had proper place in what achievements are recorded. Quality of effort has been manifest on all fronts.

President Dave Welton has been a decisive and judgmental leader for you and for the staff through this year. His understanding and companionable nature has enhanced him as a vital person to lead during an era fraught with understandable and unreasonable concerns. He has stood when necessary and at all times has exemplified medical statesmanship to bring the Society toward right and rich goals. His tenure is full of accomplishments and well may have set landmarks in policy and direction. He has been a blessing to the time in which we work and achieve and the Society should continue to recognize and utilize his stalwart capacities. Personally I thank him for the opportunity to serve in the same harness with him and to have made his administration a success.

The staff collectively, and to degrees of assignment and personal extension of their own, have been supportive and productive through the year. It is loyal in completeness to the Society, its leadership and to your Administrator. It has manifested increasing capacity, understanding, technical knowledges and strong willingness to sacrifice time and effort to achieve for the Society and the professional good. It has served publicly beyond the call of duty at times. I commend to you their services as worthy of evaluation and proper recompense. They have my personal gratitude for many efforts this year, under my trying personal circumstances.

If this lack of expression conveys an inadequate concern at needed solutions of the problems of our time,

allow me to express again my ultimate faith in medicine and the current leadership which purveys its causes. It is not a question of "the issues are always the same, the solutions can and will be made." At near fifty years of observation, I sense that issues are not characteristic of old, nor are the solutions so apparent and definable. To me this signifies that the Society, indeed the whole of the profession, had best find a unity of purpose without delay; that understandings go forth to define the problems of the day and time; and, that the ultimate in personal effort and pecuniary support be brought into a concise interplay within the Society alone to find the solutions that cry out for recourse. That sort of unity and effort may succeed against the certainty that fragmentation, jealousies, selfishness and division will bring confusion, frustration—yes, maybe disaster.

Fiscal matters are on course and are sound. The annual audit, here presented, supports this statement. Finances have been handled honestly and uprightly. At April 15, membership renewals were at 93% of level—only 1.7% below the level one year ago. Considering all factors, this is a remarkable record and indicative of a surprising degree of loyal support within the life of the Society. Statewide billing, by any measure, is a success.

The North Carolina Medical Journal never was more useful and sound in its editorial features. Management is on quality course in production and reasonable finance, though the Journal was not proposed as a fiscal vehicle—rather educational and scientific in its reaches. It has not been a fiscal burden to the membership, really. To the officers, to the committees, to the Executive Committee, to the Executive Council; and to the membership we laud and appreciate the quality of direction which has been given the staff in its work this year. We pledge our continuing effort to produce for you worthily. We sense we have justified all commissions and faith placed in us.

The future does seem possible of some brighter horizons, though we do not foretell them, we express a new faith and a new determination. Let us join in winning our battles! And in God have faith.

Attached is the original of the 1968 Annual Audit Report of A. T. Allen and Company, Certified Public Accountants of Raleigh, North Carolina, for the fiscal period of January 1, 1968 to December 31, 1968 which bears the Auditor's date of January 21, 1969 and which I recommend to you as constituting a report of the Treasurer for the year 1968 and for approval.

James T. Barnes

Executive Director-Treasurer

Auditor's Report

Medical Society of the State of North Carolina, Incorporated
 Raleigh, North Carolina
 12 Months Ended December 31, 1968

OFFICERS

Dr. David G. Welton, President	Charlotte, N. C.
Dr. Edgar T. Beddingfield, Jr., President-Elect	Stantonsburg, N. C.
Dr. John Glasson, First Vice-President	Durham, N. C.
Dr. Mark McD. Lindsey, Second Vice-President	Hamlet, N. C.
Dr. Charles W. Styron, Secretary	Raleigh, N. C.
Dr. Donald B. Koonce, Speaker of the House	Wilmington, N. C.
Dr. Robert A. Ross, Past President	Chapel Hill, N. C.
Mr. James T. Barnes, Executive Director	Raleigh, N. C.

Chairman and Members of the Finance Committee
 Medical Society of the State of North Carolina, Inc.,
 Raleigh, North Carolina

Gentlemen:

Pursuant to engagement, we have audited the books and records of the Medical Society of the State of North Carolina, Inc., Raleigh, North Carolina, for the period beginning January 1, 1968, and ending December 31, 1968, and present herewith our report.

EXHIBITS AND SCHEDULES

In presenting our findings, as the result of the audit, we have prepared four Exhibits and five Schedules, as outlined in the Index, which are attached hereto as a part of this report.

Balance Sheet—Exhibit "A":

The first statement is a list of the Assets, Liabilities, Reserves and Fund Balances, which we designate as Balance Sheet, December 31, 1968, Exhibit "A". This statement has been divided into two sections. One contains the Current Operating Fund, which represents the Current Assets, Liabilities and Reserves. The other has been designated as a Capital or Non-Operating Fund containing the office equipment, real estate and capital stock owned and used by the Medical Society—at estimated values established in a prior year plus actual cost for purchases during the last several years.

The Cash on Hand and in Bank is made up of \$50.00 Petty Cash Fund and \$133,673.78 in a checking account at First Citizens Bank & Trust Company, Raleigh, North Carolina. There was \$67,021.92 on savings deposit with the same bank. The Cash in Bank was verified through a reconciliation of the balances as shown by the records of the Medical Society with a certificate obtained independently from the bank. This reconciliation is shown in detail in Schedule—1 of this report.

Accounts Receivable—Regular in the amount of \$3,463.60 are shown on the Balance Sheet. The balance represents the total of several uncollected balances due for local advertising in the State Medical Journal.

Accounts Receivable—National Advertising in the amount of \$4,682.00 represent November and Decem-

ber, 1968, National Advertising in the State Medical Journal.

Air Travel Deposit of \$425.00 is cash deposited with Eastern Airlines for air travel credit cards.

The Construction In Progress—New Headquarters Facility Building account has accumulated costs of \$4,309.86, which are detailed in Schedule—5.

The real estate, capital stock and office equipment and furniture shown on the Balance Sheet in the amount of \$257,331.46 is listed in detail in Schedule—2. This represents an estimate made in a prior year which has been adjusted for purchases made during the last sixteen years. The items shown represent cost value of the equipment to the Medical Society as no depreciation has been recorded. As there were no liabilities outstanding against the equipment, we have shown the entire amount as Fund Balances—Capital Fund—in the Balance Sheet.

Under the "Liabilities" section we have listed those accounts, expenses, etc., incurred prior to December 31, 1968, for which statements or accounts were rendered or payment was due.

The Accounts Payable—Trade, in the amount of \$17,391.57 represents unpaid accounts at December 31, 1968. Most of these items were paid during the course of the audit.

The \$1,920.00, Dues to be Refunded, represents State dues collected which are refundable to the members. The \$31,780.00, "Due American Medical Association", is 1969 A.M.A. dues collected in 1968. The \$670.00, "American Medical Association Dues in Escrow," represents dues paid to the State Society but which cannot be remitted to the National Society at the time due to diverse disqualifying reasons. At December 31, 1968, the Society had collected from members \$3,570.00 for MEDPAC contributions and \$16,084.50 for county dues. These items will be remitted to the respective organization in regular course. The payroll taxes, \$614.99, for Social Security and \$2,441.47 for employees' withholding, were paid during the course of the audit.

The deferred credits of \$78,230.00 are for payments of \$2,030.00 received on technical exhibits space for the 1969 Convention, and \$76,200.00 on 1969 membership

dues. These remittances were received in 1968 and will be transferred to the income accounts in 1969.

The Reserve accounts set forth in Exhibit "A" are for specific purposes or specific projects, which normally last for periods longer than one year; therefore, special provisions are made to set aside funds for these specified Reserves.

The Fund Balance section of the Balance Sheet is comprised of two figures, \$43,949.71 being the balance of the Current Operating Fund for the year, and \$257,331.46 representing the balance of Capital Fund.

Statement of Fund Balances—Exhibit "B":

The second statement is an analysis of the changes in Fund Balances during the year and is detailed on Exhibit "B"

Statement of Income and Expenses—Exhibit "C":

A statement showing a budget comparison of the income and expenses for the twelve-months period is given in Exhibit "C". This statement is, in effect, a statement of operations for the year, and by examination it will be seen that the Income of \$311,407.79 is exceeded by the Expenses of \$314,052.89 by \$2,645.10. There was included in the expenses \$1,516.40 in Capital Expenditures for Equipment. Eliminating these we show a deficit from operations of \$1,128.70.

Comparing with the Budget we see that actual income was more than anticipated by \$1,607.79. The main items accounting for this were the interest income and rental income, which are not budgeted.

Further comparisons reveal that the total actual expenses were \$15,585.11 less than the budget provision.

Cash Receipts and Disbursements—Exhibit "D":

A statement showing in detail the cash receipts and disbursements of the Society during the year under review is shown in Exhibit "D" which we summarize as follows:

Cash Balance January 1, 1968	\$205,268.45
Cash Receipts During the Year	667,541.67
Total Cash Available	\$872,810.12
Less:	
Disbursements During the Year:	
For Operations	\$311,033.53
For A.M.A. and Others—Dues	338,855.00
For Special Reserves	2,097.13
For Capital Expenditures	1,516.40
For Purchase of Medical Headquarters Lot and Construction	18,562.36
Cash Balance December 31, 1968	\$200,745.70

We made a careful analysis of the cash transactions and, where practicable, traced the receipts to their original source. Disbursements for expenses were supported by cancelled checks and invoices issued in the regular course of business. We believe the funds have all been accounted for.

GENERAL COMMENTS

A surety bond covering faithful performance of Mr. James T. Barnes, Executive Director, in the amount

of \$50,000.00, is in force, held by the Medical Society and was examined by us. We also examined and found in force a Primary Commercial Blanket Honesty Bond in the amount of \$25,000.00; a fire insurance policy—with 80% co-insurance clause—covering fire loss on office equipment, books and records in the office of the Executive Director, Raleigh, North Carolina, in the amount of \$20,000.00; an Automobile Schedule Policy; a Standard Workmen's Compensation and Employer's Liability Policy; and a Comprehensive General Liability Policy.

We were extended every courtesy and cooperation during the course of the audit and we experienced no trouble in obtaining the necessary information for this report.

SCOPE OF EXAMINATION AND OPINION

We have examined the balance sheet of the Medical Society of the State of North Carolina, Incorporated, as of December 31, 1968, and the related statements of income and expense and fund balances for the year then ended. Our examinations were made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statements of income and expense and fund balances present fairly the financial position of the Medical Society of the State of North Carolina, Incorporated, at December 31, 1968, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles for non-profit organizations applied on a basis consistent with that of the preceding year.

Ver truly yours,
A. T. ALLEN & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS

Medical Society of the State of North Carolina, Incorporated

Raleigh, North Carolina

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EXHIBITS

Balance Sheet	Exhibit "A"
Statement of Fund Balances	Exhibit "B"
Statement of Income and Expenses	Exhibit "C"
Cash Receipts and Disbursements	Exhibit "D"

SCHEDULES

Cash On Hand And In Banks	Schedule—1
Schedule of Capital Assets	Schedule—2
Schedule of Land Costs—Durham-Raleigh Highway	Schedule—3
Schedule of Building Site Costs—Person and Lane Streets, Raleigh	Schedule—4
Schedule of Construction In Progress—New Headquarters Facility Building	Schedule—5

EXHIBIT "A"—BALANCE SHEET

December 31, 1968

ASSETS:

CURRENT OPERATING FUND:

Cash on Hand and in Banks—(Schedule—1)	\$200,745.70	
Accounts Receivable—Regular	3,463.60	
Accounts Receivable—National Advertising	4,682.00	
Prepaid Expenses and Supplies	777.35	
Air Travel Deposit	425.00	
Construction in Progress—New Headquarters Facility Building—(Schedule—5)	4,309.86	
TOTAL CURRENT OPERATING FUND		\$214,403.51

CAPITAL OR NON-OPERATING FUND—(Schedule—2):

Real Estate—Land—Durham-Raleigh Highway	\$ 26,604.55	
Land and Houses—Lane and Person Streets, Raleigh	191,375.51	
Office Furniture and Fixtures	39,151.40	
Capital Stock—Common—State Medical Journal Advertising Bureau, Inc.	200.00	
TOTAL CAPITAL OR NON-OPERATING FUND		257,331.46

TOTAL ASSETS

\$471,734.97

LIABILITIES, RESERVES AND NET WORTH:

LIABILITIES:

Accounts Payable—Trade	\$ 17,381.57	
Dues to be Refunded	1,920.00	
Due American Medical Association	31,780.00	
Due American Medical Association—Dues in Escrow	670.00	
Due County Medical Association	16,084.50	
Due Med Pac	3,570.00	
Federal and State Income Tax Withheld	2,441.47	
Payroll Taxes Payable	614.99	
TOTAL LIABILITIES		\$ 74,462.53

DEFERRED CREDITS:

Advance Payments on Technical Exhibit Space at 1969 Convention	\$ 2,030.00	
Advance Payment on 1969 State Membership Dues	76,200.00	
TOTAL DEFERRED CREDITS		78,230.00

RESERVES:

Reserve for Mental Hygiene Committee	\$ 5,000.00	
Reserve for Traffic Liability Safety Program	304.45	
Reserve for Medical Building Site	2,220.44	
Reserve for Mental Health State Conference Programs	2,477.06	
Reserve for Mental Health Contactorama Programs	3,761.92	
Reserve for Medical Society History Allocation	2,750.00	
Reserve for Committee on Medicine and Religion	500.00	
Reserve for Section on O & O	747.40	
TOTAL RESERVES		17,761.27

FUND BALANCES:

Current Operating Fund—(Exhibit "B")	\$ 43,949.71	
Capital Fund—(Exhibit "B")	257,331.46	
TOTAL FUND BALANCES		301,281.17

TOTAL LIABILITIES, RESERVES, AND NET WORTH

\$471,734.97

EXHIBIT "B"

STATEMENT OF FUND BALANCES

December 31, 1968

CURRENT OPERATING FUND:

Balance—January 1, 1968		\$ 61,594.71
Less: Net Deficit From Operations	\$ 1,128.70	
Reallocate Reserve Funds to Section on O & O	747.40	
Expenditures for Capital Fund—Equipment	1,516.40	
Expenditures for Capital Fund—Lot on Bloodworth Street for Medical Headquarters Facility	14,252.50	17,645.00
TOTAL CURRENT OPERATING FUND—TO EXHIBIT "A"		\$43,949.71

CAPITAL FUND:

Balance—January 1, 1968	\$241,562.56	
ADD: Purchases Made Through Current Fund—Equipment	1,516.40	
Purchase Made Through Current Fund—Lot—Bloodworth Street	14,252.50	
TOTAL CAPITAL FUND—TO EXHIBIT "A"		257,331.46
TOTAL FUND BALANCES—DECEMBER 31, 1968		\$301,281.17

EXHIBIT "C"

STATEMENT OF INCOME AND EXPENSES

12 Months Ended December 31, 1968

INCOME:

	Budget Provisions	Actual	Difference Over Or (Under)
Membership Dues—Current and Prior Years	\$238,000.00	\$237,240.00	\$
Sales of Journals, Rosters and Value Scales	2,200.00	3,147.35	
Author Contributions to Cuts	200.00	121.27	
Revenue Unexpected	900.00	505.09	
Sales of Technical Exhibit Space	17,000.00	15,280.00	
Journal Advertising—Local	9,000.00	11,426.36	
Journal Advertising—National	40,000.00	36,151.86	
Commissions (1%) From AMA for Dues Collected	2,200.00	2,199.50	
Commissions (1%) From Med Pac for Dues Collected	300.00	252.40	
Rental Income		1,450.09	
Interest Income From Savings Account		3,633.87	
TOTAL INCOME	\$309,800.00	\$311,407.79	\$ 1,607.79

EXPENSES:

Executive Budget:

A-1 Expense—President	\$ 5,000.00	\$ 5,693.09	\$
A-2 President's Secretarial Assistance	4,000.00	1,875.00	
A-3 Travel—Secretary	1,000.00	199.83	
A-4 Salary—Executive Director	20,000.00	20,000.00	
A-5 Travel—Executive Director	5,000.00	5,000.00	
A-6 Clerical Assistants—Office	35,400.00	30,232.50	
A-7 Equipment—Office	1,500.00	1,114.46	
A-8 Expenses—Office	16,500.00	15,737.06	
A-9 Bonding (In Effect to 1969)	—0—	—0—	
A-10 Auditing	1,100.00	1,325.00	
A-11 Payroll Taxes	3,195.00	3,378.68	
A-12 Insurance	640.00	725.78	
A-13 Membership Record System	6,680.00	7,033.63	
A-14 Publications, Reports and Executive Aids	200.00	226.60	
A-15 Insurable: Interest Insurance and Retirement Plan	5,296.00	5,295.30	
A-16 Salary—Assistant Executive Director	15,000.00	15,000.00	
A-17 Salary—Assistant and Education Consultant	6,720.00	6,720.00	
A-18 Travel—Assistant Executive Director	3,000.00	2,315.72	
A-19 Travel—Assistant and Education Consultant	2,500.00	1,706.87	
A-20 Assistant to Executive Director	6,096.00	6,096.00	
A-21 Travel—Assistant to Executive Director	\$ 2,000.00	\$ 1,417.25	\$
A-22 Salary—Executive Accountant	10,000.00	10,000.00	
A-23 Salary—Field Representative	7,113.00	7,113.00	
A-24 Travel—Field Representative	2,000.00	3,105.04	
Total Executive Budget	\$159,940.00	\$151,310.81	\$ (8,629.19)

Journal Budget:

B-1 Publication of Journal	\$ 38,000.00	\$ 39,447.63	\$
B-2 Cuts for Journal	500.00	579.38	
B-3 Salary—Editor	2,310.00	2,310.00	
B-4 Salary—Assistant Editor	5,300.00	5,300.00	
B-5 Expenses—Editorial Office	450.00	364.16	
B-6 Expenses—Business Manager's Office	450.00	672.04	
B-7 Equipment—Business Manager's Office	100.00	—0—	
B-8 Travel for Journal	200.00	26.10	
B-9 Payroll Taxes	580.00	683.64	
B-10 Sales Tax on Journal and Roster Sales	1,150.00	1,279.09	
B-11 Publication of Roster	5,500.00	7,276.87	
B-12 Expense—Executive Council Reports	8,500.00	9,400.00	
B-13 Salary—Advertising Secretary	4,680.00	4,680.00	
Total Journal Budget	\$ 67,720.00	\$ 72,018.91	\$ 4,298.91

EXHIBIT "C" CONTINUED:

	Budget Provisions	Actual	Difference Over Or (Under)
Intra-Functional Activity Budget:			
C-1 Expenses—Executive Council	\$ 2,500.00	\$ 3,280.15	\$
C-3 Expenses—Legislative Committees	6,500.00	2,201.73	
C-4 Expenses—Maternal Health Committee	4,000.00	4,000.00	
C-6 Expenses—Arrangements Committee	100.00	14.54	
C-7 Expenses—Scientific Exhibits Committee	675.00	94.19	
C-8 Expenses—Mental Health Committee	650.00	531.55	
C-9 Expenses—Mediation Committee	200.00	67.01	
C-10 Expenses—Chronic Illness Committee	2,000.00	671.50	
C-11 Expenses—Committees in General	2,500.00	2,974.23	
C-13 Expenses—Occupational Health Committee	200.00	14.61	
C-14 Expenses—Professional Insurance Committee	175.00	24.36	
C-16 Expenses—Negotiations Committee	200.00	—0—	
C-17 Expenses—Student AMA Committee	1,800.00	1,382.40	
C-18 Expenses—Disaster Medical Care Committee	\$ 400.00	\$ 450.39	\$
C-19 Expenses—Industrial Commission Committee	250.00	14.04	
C-21 Expenses—Medical-Legal Committee	100.00	109.95	
C-22 Expenses—Advisory to N. C. Dept. of Motor Vehicles Committee	300.00	59.77	
C-24 Expenses—Anesthesia Study Committee	400.00	400.00	
C-26 Expenses—Blue Shield Committee	500.00	5.68	
C-27 Expenses—School Health Committee	400.00	499.15	
C-28 Expenses—N. C. Board of Public Welfare Advisory Committee	100.00	8.54	
C-30 Expenses—Insurance Industry Liaison Committee	500.00	50.93	
C-31 Expenses—Rural Health Function	1,100.00	586.75	
C-34 Expenses—Scientific Works Committee	150.00	—0—	
C-35 Expenses—Headquarters Facility Committee	500.00	86.54	
C-36 Expenses—Family and Marriage Counselling Committee	500.00	—0—	
C-37 Expenses—Medicine and Religion Committee	250.00	108.59	
C-38 Expenses—AMERF Committee	100.00	15.98	
C-39 Expenses—Ad Hoc Committee on Task Force XIX	100.00	8.51	
C-40 Expenses—Scientific Awards Committee	100.00	5.00	
C-41 Expenses—Physical and Vocational Rehabilitation	178.00	—0—	
C-42 Expenses—Eye Care and Eye Bank Committee	100.00	6.20	
C-43 Expenses—Appalachia Committee	200.00	—0—	
C-44 Expenses—Blue Ribbon Committee No. 1	100.00	56.13	
C-45 Expenses—Blue Ribbon Committee No. 2	100.00	—0—	
Total Intra-Functional Activity Budget	<u>\$ 27,928.00</u>	<u>\$ 17,728.42</u>	<u>\$ (10,199.58)</u>
Extra-Functional Activity Budget:			
D-1 Expenses—Delegates to AMA	\$ 6,400.00	\$ 6,644.03	\$
D-2 Conference Dues	200.00	152.50	
D-3 Woman's Auxiliary	2,800.00	3,187.21	
D-4 Medical History Allocation	3,000.00	3,000.00	
Total Extra-Functional Activity Budget	<u>\$ 12,400.00</u>	<u>\$ 12,983.74</u>	<u>\$ 583.74</u>
Public Relations Budget:			
E-3 Committee Chairman, Out of State Travel	\$ 500.00	\$ 362.00	\$
E-5 Equipment	1,250.00	401.94	
E-6 Expenses—Office	6,000.00	5,603.67	
E-8 Publications and Executive Aids	100.00	86.64	
E-9 Audio-Visual Depiction	300.00	293.95	
E-10 Educational Distributions	800.00	201.30	
E-11 News and Press Releases	400.00	181.15	
E-12 Public Relations Bulletin	2,700.00	3,187.78	
E-13 State High School Science Fair Program	200.00	169.15	
E-14 Exhibits and Displays	650.00	539.27	
E-15 Annual Officers Conference	1,000.00	879.31	
E-17 Public and Personified Activities	600.00	596.68	
E-18 Collateral Public Relations	500.00	444.35	
Total Public Relations Budget	<u>\$ 15,000.00</u>	<u>\$ 12,947.19</u>	<u>\$ (2,052.81)</u>

FORWARDED:

EXHIBIT "C" CONTINUED:

	Budget Provisions	Actual	Difference Over Or (Under)
Annual Sessions (114th) Convention Budget:			
F-1 Programs	\$ 1,750.00	\$ 1,803.79	\$
F-2 Hotel and Auditorium Expense	4,500.00	3,204.48	
F-3 Expenses—Publicity Promotion	500.00	523.10	
F-4 Entertainment	900.00	570.03	
F-5 Orchestra and Floor Entertainment	2,500.00	1,150.00	
F-6 Guest Speakers	1,000.00	1,034.86	
F-7 Banquet Speaker	700.00	—0—	
F-8 Electric Amplification	125.00	—0—	
F-9 Booth Installation and Supplies	5,000.00	5,151.83	
F-10 Projection Expense	1,000.00	1,184.41	
F-11 Badges	200.00	105.24	
F-12 Transactions Reporting Service	2,000.00	2,265.71	
F-13 Rental—Extra Facilities	135.00	177.04	
F-14 Exhibitors Entertainment	1,375.00	704.30	
F-15 Banquet Expense	500.00	201.83	
F-16 Police Security	240.00	240.00	
Total Annual Sessions (114th) Convention Budget	\$ 22,425.00	\$ 18,316.62	\$ (4,108.38)
Miscellaneous Budget:			
G-1 Legal Counsel	\$ 7,700.00	\$ 7,686.24	\$
G-2 Reporting (Executive Council, etc.)	2,000.00	2,180.48	
G-3 Fifty Year Club	200.00	68.88	
G-4 Contingency and Emergency	\$ 1,500.00	\$ 3,332.91	\$
G-5 Employees Retirement System	7,400.00	9,017.24	
G-6 Advalorem Taxes	1,050.00	1,986.15	
G-7 Association of Professions	1,550.00	1,504.90	
G-9 Association of American Medical Colleges	225.00	191.25	
G-10 Expense of Commissioners	600.00	1,054.77	
G-11 Expense of Executive Committee	500.00	137.27	
G-12 Expense of Officers to National Meetings	1,500.00	1,587.11	
Total Miscellaneous Budget	\$ 24,225.00	\$ 28,747.20	\$ 4,522.20
TOTAL EXPENSES	\$329,638.00	\$314,052.89	\$ (15,585.11)
SUMMARY:			
TOTAL INCOME			\$311,407.79
LESS: EXPENSES:			
Executive Budget		\$151,310.81	
Journal Budget		72,018.91	
Intra-Functional Activity Budget		17,728.42	
Extra-Functional Activity Budget		12,983.74	
Public Relations Budget		12,947.19	
Annual Sessions (114th) Convention Budget		18,316.62	
Miscellaneous Budget		28,747.20	314,052.89
EXCESS OF EXPENSES OVER INCOME (DEFICIT)			\$ (2,645.10)
ADD: Capital Expenditures From Current Funds (For Equipment)			1,516.40
NET DEFICIT FROM OPERATIONS			\$ 1,128.70

EXHIBIT "D"

CASH RECEIPTS AND DISBURSEMENTS

12 Months Ended December 31, 1968

RECEIPTS:

CASH RECEIVED FROM REGULAR OPERATIONS:

Members' Dues—Current and Prior Years	\$265,190.00	
Medical Journal Advertising—Local	11,706.53	
Medical Journal Advertising—National	37,460.30	
Sale of Exhibit Space—1968 Convention	13,050.00	
Sale of Exhibit Space—1969 Convention	2,030.00	
Medical Journal Subscriptions and Sales of Rosters and Value Scales	2,897.13	
Authors Contributions to Cost of Cuts	181.31	
Commissions (1%) For Collecting National Dues	2,199.50	
Unexpected Revenue	1,300.56	
Reimbursement for Items Paid by the Society	2,879.65	
Miscellaneous Refunds	2,012.03	
Commissions (1%) For Collecting MEDPAC Dues	316.70	
TOTAL CASH RECEIVED FROM REGULAR OPERATIONS		\$341,223.71
AMERICAN MEDICAL ASSOCIATION—REGULAR DUES COLLECTED		206,790.00
COUNTY DUES COLLECTED		89,779.00
AMERICAN MEDICAL ASSOCIATION—DUES PLACED IN ESCROW		330.00
MENTAL HEALTH SPECIAL RESERVE		1,125.00
RENTAL INCOME		1,450.09
INTEREST EARNED ON SAVINGS ACCOUNT		3,633.87
MEDICAL EDUCATION POLITICAL ACTION COMMITTEE		23,210.00
TOTAL RECEIPTS		\$667,541.67
CASH BALANCES—JANUARY 1, 1968:		
First Citizens Bank & Trust Co., Raleigh, N. C.		
Cash on Hand		205,268.45
TOTAL TO ACCOUNT FOR		\$872,810.12

DISBURSEMENTS:

DISBURSEMENTS FOR CURRENT OPERATIONS:

Expenditures—Executive Budget	\$148,976.84	
Less: Capital Expenditures—Office Equipment	1,114.46	\$147,862.38
Expenditures—Journal Budget		71,554.29
Expenditures—Intra-Functional Activity Budget		17,899.51
Expenditures—Extra-Functional Activity Budget		10,176.49
Expenditures—Public Relations Budget	\$ 13,223.35	
Less: Capital Expenditures—Office Equipment	401.94	12,821.41
Expenditures—Annual Sessions (114th) Convention Budget		19,059.29
Expenditures—Miscellaneous Budget		28,605.50
Refunds of Dues Over Collected		775.00
Refunds of AMA Dues in Escrow		330.00
Refunds—Miscellaneous		140.00
Accrued Payroll Taxes—12-31-67		1,971.64
Prepaid Supplies		1,039.79
Items Paid by the Society—Billed to Others		1,661.94
Total		\$313,897.24
LESS: Deductions From Wages—Unpaid at 12-31-68: Payroll Taxes		2,863.71
TOTAL DISBURSEMENTS—CURRENT OPERATIONS		\$311,033.53
PAYMENTS TO MEDICAL EDUCATION POLITICAL ACTION COMMITTEE		28,148.50
PAYMENTS TO AMERICAN MEDICAL ASSOCIATION—REGULAR DUES COLLECTED		220,090.00
PAYMENTS TO COUNTY MEDICAL ASSOCIATIONS—REGULAR DUES COLLECTED		90,616.50
PURCHASE OF LOT MEDICAL HEADQUARTERS SITE		14,252.50
CONSTRUCTION IN PROGRESS		4,309.86
EXPENDITURES FOR CAPITAL ASSETS		1,516.40
RESERVE FOR MEDICAL HEADQUARTERS FACILITY COMMITTEE		1,425.00
RESERVE FOR TRAFFIC SAFETY SURVEY		10.79
RESERVE FOR SPECIAL INSURANCE FUND		322.84
MENTAL HEALTH SPECIAL RESERVE		338.50
TOTAL DISBURSEMENTS		\$672,064.42
CASH BALANCES—DECEMBER 31, 1968:		
First Citizens Bank & Trust Co., Raleigh, N. C. and Cash on Hand		200,745.70
TOTAL ACCOUNTED FOR		\$872,810.12

SCHEDULE—1

CASH ON HAND AND IN BANK

December 31, 1968

FIRST CITIZENS BANK & TRUST COMPANY, RALEIGH, N. C.:

Balance Per Bank Statement					108,839.36
ADD: Deposits in Transit					30,977.63
Total					\$139,816.99
LESS: Outstanding Checks:					
	Number	17778	\$200.00	Number	18576
		17926	120.00		18578
		18354	17.50		18593
		18431	100.00		18594
		18432	1.00		18598
		18434	20.00		18599
		18518	40.00		18601
		18520	60.00		18602
		18522	12.50		18603
		18523	80.00		18604
		18547	225.00		18605
		18550	43.26		18606
		18567	334.61		18607
		18571	862.64		18609
					25.50
					108.97
					345.40
					1,886.27
					796.95
					181.45
					82.64
					76.84
					239.68
					30.11
					38.99
					17.60
					75.00
					121.30
					6,143.21
BALANCE PER BOOKS					\$133,673.78
PETTY CASH FUND					50.00
SAVINGS ACCOUNT NO. 0861010544—FIRST CITIZENS BANK & TRUST COMPANY, RALEIGH, N. C.					67,021.92
TOTAL CASH—TO EXHIBIT "A"					\$200,745.70

SCHEDULE—2

SCHEDULE OF CAPITAL ASSETS

December 31, 1968

OFFICE FURNITURE AND FIXTURES:
EXECUTIVE OFFICE:

Wooden File Case—Letter Size	\$ 21.66
Typewriter Desk	25.00
Steel Office Safe	150.00
Steel File Case—Letter Size	20.00
Four Steel Card Files	20.00
Office Chair	35.20
One Desk	62.55
Steel Filing Cabinet	24.50
Office Desk	47.95
Letter File—Two Drawer	29.46
Steel Filing Cabinet	71.75
Office Chairs	40.00
Office Desk	47.29
Office Equipment—Miscellaneous	1,149.39
One Telephone Table—Wooden	15.45
Two Pairs 12" x 33" C. S. Vents and Brackets	8.77
One Desk Lamp	10.26
Two Master Model Audiographs and Attachments	725.67
One Map of Greater Carolinas	37.50
Two Double Files 3" x 5"	11.85
Three Pendaflex Frames (Installed)	5.57
Two Gray Steel Cabinets	103.00
Three Transfer Files	11.89
One Spec. B. Outfit File	7.25
Two Legal Filing Cabinets	19.90
One Filing Shelf	2.50
Plywood Carrying Case for Audiograph	17.00
Map Framed	3.61
Charter Framed	2.57
Cash Box	2.79
Steel Desk	158.98
Three Desk Trays With Stackers	8.57
Waste Basket	1.40
Large Chair Mat	9.27
Glass Desk Top	11.38
Stenograph and Tripod	100.70
Four Drawer Steel Filing Cabinet	78.03
Four Pendaflex Steel Frames (Installed)	7.42

Postal Scale	6.50
Numbering Machine	14.88
Filing Stool	11.23
Bookcase	63.86
Remington Rand Electric Adding Machine	215.01
Metal Storage Cabinet	78.28
Metal Filing Cabinet	92.76
Two Cabinet Shelves (Installed)	10.30
Metal Cash Box	2.32
Pro Rata Share of Cost of Mimeograph Machine	337.47
Typewriter Table	21.00
Metal Correspondence Separator	6.18
Metal File and Sections	68.55
Two Typewriters—Large Type (Bulletin)	321.23
Kardex File and Parts	1,842.36
Catalogue Case	20.00
Metal File and Frames	93.07
Secretarial Foot Control	25.75
Three Transfer Files	16.23
Junior Pendaflex File	22.87
Book Case Section	26.25
Swivel Chair and Arm Chair	74.48
Audiograph Converter	28.84
Pendaflex File	5.88
Wood Desk and Two Files	281.43
De Jur Camera With Flash Attachment and Case	100.44
Audiograph Machine—Used	300.00
Flight Bag	38.31
Three Box Files	9.42
Portable Lectern	29.93
Metal File	114.33
Checkwriter—Paymaster	101.48
Desk and Chair	268.45
Supply Cabinet Shelves	25.35
Pro Rata Share of Cost of Imperial Safe	
ED "60" (Kardex)	290.00
Air Conditioning Equipment—Office	1,621.00
Five-Drawer Letter File and Frames	122.78
Five Transfer Files	20.35
Two Five-Drawer Filing Cabinets	245.56
American Medical Dictionary	25.00
Two Plate Glass Tops for Desks	20.31
Desk, Swivel Chair and Desk Set	253.87
Pro Rata Share of Cost—Varietyper—Used	50.00
Pro Rata Share of Cost—A. B. Dick Offset Duplicator	1,602.27

FORWARDED:

SCHEDULE 2 CONTINUED:

Ten Pronto Files	46.87
Two Four-Drawer Durable File Cabinets	61.70
One Kardex File Safe and Base	593.28
Pro Rata Portion of Postage Mailing Machine	427.85
Pro Rata Portion of Robotyper	330.50
Pro Rata Portion of Perforator	121.03
Pro Rata Portion of One Table	18.47
Pro Rata Portion of Postal Scale	12.48
Stenorette Machine No. 215311	158.06
Stenorette Machine No. 219890	158.06
Two Transcribing Kits For Stenorettes	60.08
Telephone Adapter and Switch Box	17.66
Two Gray Legal Desk Trays	14.63
Book Case Section No. 813 Walnut	29.26
Gray Table No. 1803	49.59
Three Transcribing Kits for Stenorettes	83.75
Four Stehlo Clips for Stenorettes	12.00
Documentor Electric Typewriter	372.55
Remington Electric Typewriter No. E2233256	330.21
Pro Rata Portion of Used Addressograph Machine No. 312185 With Work Table	75.00
Pro Rata Portion of Hand Truck	3.60
Pro Rata Portion of Two Gingher Valets—No. 7-6-U	26.59
Pro Rata Portion of Remington Electric Typewriter No. 2129420	153.83
Three Letter Size File Cabinets	103.72
One—TU-21 Stak Tube Roll File	40.00
Pro Rata Portion of One No. 11919 Paper Cutter	10.70
One—15 Ft. x 16 Ft. Rug and Mat	144.82
Pro Rata Portion of Five Tables	27.78
One—122H Steel Cart with 3 Shelves	35.76
One Brief Case	53.51
Six Four-Drawer Letter Size Files	199.31
One Documentor Electric Typewriter	372.55
One Modern Tub Chair	31.82
Two Bookcases	66.64
One Electric Projection Pointer	77.15
Two Side Arm Chairs, Walnut, Maroon Upholstery	77.62
Two Side Chairs, Walnut, Maroon Upholstery	55.62
One Desk and Chair	44.81
One Conference Table—Walnut	149.81
One Executive Swivel Chair, Walnut, Maroon Upholstery	104.37
One Endura Telephone Timer	13.11
One Walnut Credenza	125.30
Carpet	63.95
Two Glass Desk Tops	22.45
One Book Case (Used)	15.45
Pro Rata Portion of One Toledo Postage Scale (Used)	77.25
One 3-Section Book Case	137.61
Pro Rata Portion of One Divisumma 24 Calculator	100.00
Mirror—Secretary's Office	1.01
Portable Electric Baseboard Heater	17.82
Lamp for Conference Room	15.43
Drapes and Rods for Conference Room	114.75
Walnut Dictionary Stand	67.07
Costumer	12.98
Four Side Chairs	73.05
Stenorette Portable Dictating Machine and Case No. 35077	228.11
Pro Rata Portion of One Premier Ream Cutter Checkwriter—No. XL4-076960	130.00
Pro Rata Portion of One Flex-O-Build Desk End File	45.05
Pro Rata Portion of No. 1900 Addressograph No. 502 Sort-A-Tray	38.15
Pro Rata Portion of Walnut Step Table	200.00
Pro Rata Portion of White Table Lamp	9.95
Pro Rata Portion of Black Settee	9.25
Pro Rata Portion of Postal Scale Rate Chart	4.10
Carrying Case for Adding Machine	31.08
Electric Fan	16.13
No. 412 File Unit	18.49
Pro Rata Portion of Verifax Copier	19.45
6-Tier File	15.72
Pro Rata Portion of 4-Drawer Letter File	159.33
Pro Rata Portion of No. 7795 Virco Desk	8.72
Pro Rata Portion of No. 4841 Thomas Collator	130.91
File Cabinet, 4-Drawer No. 24A	16.43
Remington Typewriter No. 3054244	93.00
Remington Typewriter No. 3521299	41.95
One Hand Truck	388.90
Steel Shelving	388.90
Walnut Pamphlet Rack	13.59
Plastic Letter Tray	123.60
Two Combination Desk Top Files	7.00
Stenograph Machine No. 645223 (Used)	2.17
One No. 5F Cosco Stenographic Chair	19.26
One No. 1260 Desk—Plastic Top	100.00
One Steno Chair	30.85
One Scriptor 13" Elite Electric Typewriter	177.52
Remington Rand Cabinet Kardex	30.85
4 No. 8851 5-Drawer Files	311.85
Electric Pencil Sharpener	586.84
	401.78
	34.98

60 x 34 Desk	149.25
Feeder Unit for Addressograph	936.53
One KIK Step Stool	13.95
Shelving Units	238.85
One Scriptor Electric Typewriter	366.17
Two 5-Drawer Files—Gray	200.98
One Quant 20 Adding Machine	158.65
Two 2 x 4 Tables	28.84
Storage Cabinet	83.17
Verifax Photo Copier	296.16
Walnut Oil Table	108.15
58" Desk Topper Shelf Unit	54.75
IBM Equipment:	
17 Control Panels	374.27
1 Sorter Rack	49.70
5 Sets Manual Wire Complements	177.31
1 10-Drawer Card File	135.96
1 Control Panel Cabinet	71.54
Mosler, Fire-Proof File—4 Drawer	319.30
Cory Letter Files (3)—5 Drawer	290.95
Cosco Secretarial Chair	30.85
Combo Binding Machine	46.95
Model L-H Letter Opener	58.71
No. 3H-V Combination Horiz.-Vert. File (2)	20.83
18" Pendaflexer—2 Drawer	43.78
Kruger Stool	7.21
File Cabinets—4 Drawer (7)	223.51
Additional Cost—Freight and Transportation on 20 Drawer Card File (IBM) Purchased 12-31-67	23.32
1 Costumer Rack	15.32
2 Pebble Cork Boards	51.09
Underwood Electric Typewriter—700 TW	334.75
Projection Pointer	97.00
1 Costumer Rack	21.63
1 Desk	145.23
1 Chair	52.09
2 Shelving Units	66.95
1 8 Station Collator—Paper Gatherer	173.27
1 3M Portable Compact Copier	69.95
1 TU-DROR Pendaflexor File Cabinet	63.86
TOTAL EXECUTIVE OFFICE	\$27,328.01

PUBLIC RELATIONS OFFICE:

Four Aluminum Desk Trays with Supports	\$ 9.00
Steel Costumer	14.20
Cash Box	1.50
Supply Cabinet	37.00
Two Waste Baskets	7.00
Metal Executive Desk	112.60
Executive Chair	48.80
Two Side Arm Chairs	60.40
Metal Secretary Desk	136.40
Secretary Chair	30.20
Storage Cabinet	37.00
Two Chair Mats	12.90
Ring Top Card File	1.60
Stapler	4.95
Punch	3.15
Metal Letter File with Lock	61.60
Storage Cabinet	37.00
Royal Typewriter	133.31
Two Electric Fans	63.29
Four-Drawer Metal File	69.49
Two-Drawer Metal File With Lock and Base	18.36
Supply Cabinet	75.00
Two Desk Trays and Stacks	4.64
Metal Storage Cabinet	57.29
Pro Rata Share of Cost of Mimeograph Machine	508.53
Pendaflex Frames (Installed)	4.64
Folder Machine and A. B. Dick Stand	397.88
Used Elliott Addressograph	123.83
Two Telephone List Finders	6.06
Pendaflex Frame (Installed)	4.50
Used Projector—Nedco	153.43
Model DLS Screen	32.45
Record Player	101.25
Microphone and Stand	19.40
Projector with Case—Slide	94.47
Lectern Mike	56.85
Display Equipment—Flip Chart	31.74
One Camera and Flash	88.98
Film Holders and Adapters	19.00
Metal File	95.79
Pro Rata Share of Cost—Varityper—Used	50.00
Pro Rata Share of Cost—A. B. Dick Offset Duplicator	1,602.26
Pro Rata Portion of Postage Mailing Machine	427.85
Pro Rata Portion of Robotyper	360.50
Pro Rata Portion of Perforator	121.02
Pro Rata Portion of One Table	17.58
Pro Rata Portion of Postal Scale	12.47
Stenorette Machine No. 205817	205.06
Pro Rata Portion of Used Addressograph Machine No. 312185 With Work Table	75.00

FORWARDED:

Pro Rata Portion of Hand Truck	3.13	Stenorette Machine No. 214740	196.75
Pro Rata Portion of Two Gingher Valets No. 7-6-U	8.83	Stenorette Machine No. 216837	196.75
Pro Rata Portion of One No. 11919 Paper Cutter	10.70	TOTAL ANNUAL SESSIONS CONVENTION	\$ 628.23
Pro Rata Portion of Five Tables	27.78		
Two 4-Drawer Files Complete with Hanger Frames	194.47	INTRA-FUNCTIONAL ACTIVITIES:	
Pro Rata Portion of One Toledo Postage Scale (Used)	77.25	Gray Secretary's Desk	\$ 224.35
One Underwood Scriptor Electric Typewriter—No. 21-8721980	337.64	Gray Secretary's Chair	33.77
Pro Rata Portion of One Divisumma 24 Calculator	327.79	TOTAL INTRA-FUNCTIONAL ACTIVITIES	\$ 261.12
Crestline DeLuxe Projector	79.26	TOTAL OFFICE FURNITURE AND FIXTURES	\$39,151.40
Pro Rata Portion of One Premier Ream Cutter	129.47		
Pro Rata Portion of One Flex-O-Build Desk End File	13.00	REAL ESTATE:	
Scriptor Electric Typewriter S No. 8654172	300.00	Land—Durham-Raleigh Highway (Schedule—3)	26,604.55
Pro Rata Portion of No. 1900 Addressograph	200.00	Land and Houses (3) Lane and Person Streets, Raleigh—(Schedule—4)	191,375.51
Pro Rata Portion of Walnut Step Table	9.24	OTHER ASSETS:	
Pro Rata Portion of White Table Lamp	4.09	Capital Stock—State Medical Journal Ad- vertising Bureau, Inc.	200.00
Pro Rata Portion of Black Settee	30.67	TOTAL CAPITAL ASSETS—TO EXHIBIT "A"	\$257,331.46
Pro Rata Portion of Postal Scale Rate Chart	16.13		
Pro Rata Portion of Verifax Copier	159.38		
Pro Rata Portion of 4-Drawer Letter File	42.75		
Pro Rata Portion of No. 7795 Virco Desk	15.00		
Pro Rata Portion of No. 4841 Thomas Collator	60.99		
One Carri-Voice with Microphone No. 444118 and One Revere Model T-3000 Tape Re- corder No. 3001312	480.00		
Two 8B51 Gray File Cabinets	236.66		
One 8B51 Gray File Cabinet	100.57		
One 5-Drawer Gray File Cabinet	100.48		
Cosco Secretarial Chair	30.90		
Bell & Howell Projector	175.00		
File Cabinets—4-Drawer (2)	63.83		
1 8 Station Collator—Paper Gatherer	173.28		
2 5-Drawer Corry Files	228.66		
TOTAL PUBLIC RELATIONS OFFICE	\$9,284.20		
JOURNAL BUSINESS MANAGER'S OFFICE:			
Steel File and Frame	\$ 88.27		
Pro Rata Share of Cost of Imperial Safe ED "60" (Kardex)	170.77		
Book—"Successful Sales Promotion"	5.65		
Pro Rata Portion of Remington Electric Typewriter No. 2129420	153.83		
Pro Rata Portion of One Divisumma 24 Calculator	200.00		
Pro Rata Portion of No. 1900 Addressograph	100.00		
Pro Rata Portion of Verifax Copier	106.24		
Stenorette Combination Unit	105.00		
One Section No. 811 Hale Bookcase	31.52		
File Cabinets—4 Drawer (2)	63.86		
TOTAL JOURNAL BUSINESS MANAGERS OFFICE	\$1,025.14		
RURAL HEALTH AND MEDICAL CARE COMMITTEE:			
Masco Tape Recorder	\$ 159.18		
One Desk	185.40		
One Steel File and Trays	121.29		
One Soundcriber	150.00		
Pro Rata Portion of Two Gingher Valets— No. 7-6-U	8.83		
TOTAL RURAL HEALTH AND MEDICAL CARE COMMITTEE	\$ 624.70		
ANNUAL SESSIONS CONVENTION:			
Portable Lectern	\$ 29.67		
Stenorette Machine No. 219618	205.06		

SCHEDULE—3

SCHEDULE OF LAND COSTS—
DURHAM-RALEIGH HIGHWAY

12 Months Ended December 31, 1968

Options	\$ 450.00
Land Purchase—Durham-Raleigh Highway	24,650.00
Legal Service	126.75
Survey and Map of Property	477.80
Architect Service	400.00
Legal Fees—Re:Rezoning, Etc.	500.00
TOTAL—TO SCHEDULE—2	\$26,604.55

SCHEDULE—4

SCHEDULE OF BUILDING SITE COSTS
PERSON AND LANE STREETS, RALEIGH

12 Months Ended December 31, 1968

Land Purchase—Person and Lane Streets, Raleigh (Includes three Houses)	\$175,000.00
Legal Services	825.00
Survey and Map of Property	—0—
Architect Service	954.00
Appraisal Fees	200.00
Photos	69.01
Cleaning Lot	75.00
Lot—217 North Bloodworth Street	14,252.50
TOTAL—SCHEDULE—2	\$191,375.51

SCHEDULE 5

SCHEDULE OF CONSTRUCTION IN PROGRESS
NEW HEADQUARTERS FACILITY BUILDING

12 Months Ended December 31, 1968

Worthy and Company—Consulting Services	\$ 2,121.69
J. A. Edwards—Engineering	666.68
Geotechnical Engineering Company—Soil Borings	1,143.50
Miscellaneous—Maps, Printings, Lot Cleaning, etc.	377.99
TOTAL CONSTRUCTION IN PROGRESS— TO EXHIBIT "A"	\$ 4,309.86

REPORT OF THE ASSISTANT EXECUTIVE DIRECTOR

William N. Hilliard

The overall objectives charted by the Society Officials and your Executive Director have received my earnest effort and consuming attention during the period of this report. It is sincerely hoped that such effort has contributed materially to a continued development and productivity in the best interest of the State Medical Society.

Mr. James T. Barnes, as Executive Director, has willingly rendered wise guidance in the proper overall coordination and direction of staff activities. His advice and guidance is particularly helpful and appreciated.

My sincere thanks also are due the Chairman of the Committee on Public Relations, Dr. Philip Naumoff, on the many occasions of Society matters being referred to him. Advice and counsel has also been willingly given by the Chairman of the Professional Service Commission, Dr. J. Henry Cutchin, Jr., under Pines, along with general assistance for arrangements of the meeting.

The Annual Conference of County Medical Society Officers and Committeemen, sponsored by the Committee on Public Relations, continues to be a major effort of the Committee. This year's conference was conducted on Friday evening and Saturday, January 24-25, 1969, maintaining a high standard of speaker participation. All reports seem to indicate that this annual conference sustains a valuable effort of beneficial service to the County Society officials in attendance. Fifty of the county medical societies were represented, and a total of 100 physician members were in attendance. The necessary preparation and arrangements for the conference involved considerable time and effort, principally during the winter period just before the first of the year and during January up to the date of the meeting.

A two-day Speech Training Session was offered in Durham on April 24-25, 1968, for Medical Society members as a cooperative effort of the Committee on Public Relations and the Speakers Bureau of the American Medical Association. The program was evaluated by the participants as very beneficial, and since enrollment is limited an additional such training session is being planned for November of 1969.

We have also worked with many different committees of the Society on various projects. The Committee on Insurance Industry, for several years, has held quarterly meetings with insurance industry representatives comprising the State Committee of the Health Insurance Council for discussion and consideration of items of mutual interest. A principle function of the joint undertaking is the Claim Review Service (C.R.S.). All meetings of this joint effort have been attended and reported in a staff capacity.

The Committee on Utilization sponsored a series of six regional workshops during mid November 1968 on "Simplified Approaches To Utilization Review." The

conferences were held at Greenville, Raleigh, Fayetteville, Winston-Salem, Charlotte, and Asheville. Subsequent to the workshops, it was felt that the excellent educational content of the programs should be made available in written form, and in keeping with this thought, the talks are being revised for submission to and consideration by the **North Carolina Medical Journal**.

During the August to November period, considerable time and travel was devoted to County Medical Society meetings to assist officials of the Society in their presentations concerning reconsideration of the headquarters facility proposal. Fifteen county and district medical society meetings were attended during this period.

Preparation and coordination of publicity efforts in connection with the Annual Session of the State Society has been repeated during the year, as well as, handling and dissemination of publicity and promotion of various other Society activities or meetings when they were appropriately of interest to the general public.

The Public Relations Bulletin was written and published on the basis of nine issues during the year, being published monthly except for the months of May, July, and August. The Bulletin would seem to be an effective means of reaching the Medical Society membership judging by the volume of requests received for inclusion of material. Every attempt is made to maintain a brevity of content and importance of information as a criteria.

An exhibit at the North Carolina State Fair, October 14-19, 1968, was sponsored by the Committee on Public Relations on behalf of the State Society. The exhibit featured an AMA exhibit entitled "The Drinking Driver" and proved to be one of the more popular exhibits in the area of its location. In conjunction with the exhibit, and in cooperation with the N. C. Association of Medical Technologists, a blood typing service was again offered whereby fair patrons had the opportunity of having their blood type determined and receive a pocket size identification card indicating the individual's blood type. The fair exhibit also provided an excellent opportunity for the distribution of educational literature such as the First Aid Chart and thereby reaching, with health education information, a cross section of the North Carolina population not contacted through other methods.

A County Medical Society "Secretary Check List for 1969" was revised in cooperation with Mr. Barnes and was printed for distribution at the Conference of County Medical Society Officers and Committeemen. Copies were also mailed to all County Medical Society Secretaries not in attendance at the conference.

Gift subscriptions to the AMA magazine TODAY'S HEALTH have been presented to the Governor, Council of State, members of the General Assembly, Supreme and Superior Court Judges, and to each College Library, as a project of the Committee on Public Relations.

A "Reference List of Medical Spokesmen" comprising the County Medical Society Presidents, Secretaries, and Chairmen of the Committee on Public Relations

is being distributed to the State's newspapers as a continuing effort in behalf of promoting mutual understanding between the medical profession and representatives of the information media.

The Society produced a thirty-minute television program on health careers in North Carolina in cooperation with the N. C. Association of Professions. The program has been televised twice over the University of North Carolina Educational network. Once during 1968 and a second time on March 26, 1969. The program is in the process of being rewritten and on April 24, 1969, will be produced again on videotape in a more appropriate content for use over commercial television stations in North Carolina and for the production of a 16mm print of the program to be made available to high school career counselors and student groups.

The details of the Committee on Public Relations support and cooperation with the State High School Science Fair program have been worked out annually whereby a representative of the Biological Science Division of the State High School Science Fair is invited to display his or her exhibit at the Annual Meeting of the State Medical Society. Criteria for selection of the exhibitor invited is based on the relationship of the exhibit to medicine.

The Committee on Public Relations continues its support and cooperation with the N. C. Association of Rescue Squads to the extent of furnishing trophies for the First Aid Competition, first, second, and third place trophies, at the Annual Convention of the N. C. Association of Rescue Squads. First Aid competition is one of the feature portions of the annual program of that association.

The Orientation Information Kit for new members is distributed to new members by the Headquarters Office as their membership in the State Society is processed, except in cases where the County Society has already delivered the materials to the new members at the local level. An important unit of the kit is the "Information Booklet for Physicians" which is currently in its second edition and expects to be revised within the year for development of a third edition bringing the pertinent contents up to date.

Out of state meetings attended included: The AMA Congress on Environmental Health Problems, Chicago, Ill., April 29-30, 1968; Regional Legislative Conference of the AMA, Atlanta, Ga., May 23-24, 1968; AMA Communications Institute and County Society Officers Conference, Chicago, Ill., August 20-21, 1968; Clinical Session of the AMA, Miami Beach, Fla., November 29-December 4, 1968; and Third AMA Congress on Socio-Economics of Health Care, Chicago, Ill., March 23-29, 1969.

The staff of the Headquarters Office stands ready to assist county medical societies wherever possible, but to do so, we must first know about your needs. Many aids in the form of literature, films, or staff assistance are available to you on request. The local physician, by wise participation in community or state activities, can demonstrate by deeds and words what modern medicine under free enterprise can accomplish for the benefit of his fellow men. Such constructive effort

at the local level frequently generates understanding and support for the medical profession.

In conclusion, we wish to emphasize that every effort will be continued to carry out the work of the Society as efficiently as possible toward whatever goals may be set by the appropriate officials of the Society.

As an indication of detailed effort reference is made to the following tabulations with regard to the public relations mailings:

April 1, 1968 to April 1, 1969	
Mail Received	2,635
Mail dispatched	17,446
News releases mailed	5,153
Films	16
Educational pamphlets and First Aid Charts	1,596
Public Relations Bulletin	39,613
Exhibits	9

Respectfully submitted,
William N. Hilliard
Assistant Executive Director

**"AMBASSADORS FOR HEALTH"—1968-1969
REPORT OF THE AUXILIARY TO THE
MEDICAL SOCIETY OF THE STATE OF
NORTH CAROLINA**

It is with sincere gratitude and pride that I report to you the activities of your Auxiliary for the year 1968-1969—gratitude for the honor and privilege of serving as Auxiliary President and gratitude to you for your many kindnesses to us always, for your generous financial help, and for your continued interest in and cooperation with our programs. I am proud, too, immensely so. My pride stems from the comprehensive and outstanding accomplishments of your wives, our Auxiliary members.

We are particularly grateful to Dave Welton for his special kindness and help to us this year. It has been my distinct privilege and sincere pleasure to serve my term of office simultaneously with that of Dr. Welton and his aura of effective leadership has afforded us guidance and opened new vistas of service for our Auxiliary.

We are especially grateful, also, to Mr. James T. Baines, Mr. William N. Hilliard, and the entire headquarters staff. They have made us feel that no request was too small to be considered and that none was too large to be denied. For this and for their dedicated, able, and untiring work in behalf of this Society and its Auxiliary, we extend our heartfelt thanks.

To Dr. E. T. Beddingfield, Jr., President-elect, (who due to the unfortunate circumstance of his geographic proximity to this writer has been obliged to "listen" a great deal more than was convenient) to the other members of the Executive Council, to Dr. Roscoe D. McMillan, Chairman, and to the other members of our Advisory Committee, and to each of you, the members of the Medical Society of the State of North Carolina, we express our deep appreciation.

It is the greatest honor of all to serve as your Auxiliary. It is our earnest hope that our efforts and the

record of service we have compiled in behalf of each of you and of organized medicine will make us worthy of the name of your Auxiliary and of the confidence you have placed in us.

Our Auxiliary year has been an exciting, enthusiastic, busy, and effective one. It has been characterized by the involvement, the dedicated and comprehensive efforts, and the real cooperation of each Auxiliary member. It has reflected a real concern for unmet community needs and it has enjoyed pride in accomplishment and in fulfilled goals. All of the officers and committee chairmen on both the local and state levels as well as each individual Auxiliary member have worked together effectively and words cannot express adequately my gratitude to each of them.

The Auxiliary theme for 1968-1969 is "Ambassadors for Health." The Auxiliary serves as a liaison group between the Society and the general public; we are emissaries of the medical profession. And so, we have used all of the wisdom, energy, and enthusiasm we could muster to be good "Ambassadors," to be a vital and helpful part of medicine's diplomatic corps. Since all ambassadors have portfolios, we have attempted to accomplish this through a "Portfolio of Projects." These have been many and varied, stimulated by unmet needs in our communities and in our state. It is impossible, of course, to describe all of these in the brief span of this report, but I would like to summarize for you briefly a few of the most outstanding of these—the highlights of our efforts as we see them.

A large and concerted effort has been continued in the field of health careers recruitment and re-enlistment, concerns that must be paramount in our efforts because of the acute shortage in all of the more than 200 health careers and because of the projected growth of the health industry. Extensive work has been done in the recruitment of new health personnel through high school career days, sponsorship of and work with health careers and science clubs, work with guidance counselors, and interest in and assistance to the Summer Work Experience Program for high school and beginning college students. The state and local auxiliaries have worked closely and cooperated fully with Health Careers for North Carolina, sponsored by the North Carolina Hospital Association. "Operation Recall," the recall and re-enlistment of currently non-working health manpower has centered around our efforts to re-enlist and retrain the more than 700 presently unemployed RNs now living in North Carolina. To this end, a list of the technical institutes and community colleges where the needed courses would be taught, a list of the persons in charge of this program at each of these institutions, and a proposed and approved general duty nurse refresher course outline have been provided each Auxiliary. Many of the auxiliary groups have implemented these suggestions and the percentage of those who complete the course and go back to active duty is very gratifying.

The tragic death toll and the ever-growing list of the permanently injured and disabled due to acci-

dents on our highways have prompted the beginning of a new Safety-Disaster Preparedness project. This project, the first of its kind in the nation, is a cooperative one. The Trauma Committee of the Medical Society, the North Carolina Department of Motor Vehicles, the North Carolina Hospital Association, the North Carolina Committee on Nursing and Patient Care, North Carolina Blue Cross and Blue Shield, Inc., and the state Auxiliary have united their efforts in a public education project to urge each of the 2½ million Tar Heels who drive (half of our population) to carry at all times emergency medical identification information. In addition to these extensive efforts, the Auxiliary is attempting through further public education to also reach the other half of our citizens who do not drive and to urge those who need to have certain medical facts known immediately (should they have an accident) to wear the Medic-Alert tags.

Two suicide prevention workshops were held this fall in Burlington and Wilson. The state Auxiliary sponsored these in conjunction with the two local auxiliaries, mental health associations, and the N. C. Mental Health Association. Dr. Robert L. Garrard, outstanding psychiatrist from Greensboro, and Dr. Edwin Shneidman, Director of the Center for the Studies for Suicide Prevention, NIMH, were the principal speakers. Other workshop leaders represented other crisis and suicide prevention centers in North Carolina. The purpose of these very successful workshops was to educate toward and to solicit public support for the establishment of crisis centers in all N. C. towns and cities. Three new centers are being planned since the fall workshops, and we are extremely pleased with this result. The Auxiliary helped sponsor the Cherry Hospital Symposium for the physicians and their wives in the 33 catchment area served by Cherry Hospital; we will cooperate with the Junior Leagues in N. C., Governor Robert W. Scott, the N. C. Mental Health Association, the N. C. Council of Child Psychiatrists, and the Governor's Commission on Juvenile Delinquency in their sponsorship of a state-wide forum on March 25th. The forum on "The Emotionally Disturbed Child in N. C." will attempt to further clarify the largely unmet needs of the more than 50,000 emotionally disturbed children in this state.

Family Life Education courses are desperately needed in many of the school systems of the state and we are attempting to meet this need by training our teachers to teach this course, beginning on the fifth grade level. The state Auxiliary and the Forsyth-Stokes Auxiliary co-sponsored two workshops for all of the fifth grade teachers in the 1,691 elementary schools in N. C. Auxiliary members substituted for the teachers who attended, paid for their transportation to Winston-Salem to the meeting, and bought their lunches at the Moore Elementary School where the course was taught by two MDs and a social worker with the public schools.

One of the very special events of this Auxiliary year was the dedication, on December 8, 1968, of the Country Doctor Museum, long a dream of many of our

members. The Museum, located in Bailey, N. C., was endorsed by both the Society and the Auxiliary at their May, 1968, conventions and is the only purely medical museum in the nation. Unique and truly an historical "first", the museum is an amazing repository of many rare and important medical artifacts, antique medical books and manuscripts, and pharmacy antiques. Its purpose is to commemorate in a useful and tangible way our fore-fathers in the medical profession and to perpetuate the family physician.

On March 6, 1969, the Auxiliary will again visit the N. C. General Assembly—not to lobby but to learn. The occasion is our second "Day in the Legislature." The Legislation Committee of the Medical Society will brief Auxiliary members before their visit to their respective legislators and to the House and Senate sessions. An address by Mrs. John B. Chase, Democratic Representative from Wayne County, and a tour and reception at the Executive Mansion are other highlights of the day. This is but one of the many legislative activities pursued by the various local auxiliaries. Great emphasis has been placed on AMPAC-MEDPAC membership, precinct work, and activities during the 1968 elections.

Our Auxiliary has been well represented at all national meetings. I, personally, will have traveled 25,000 miles, attended a total of 67 Auxiliary or auxiliary related meetings, spoken 35 times at such meetings as 8 county Auxiliary meetings, 5 District meetings, and 10 state or out-of-state meetings etc. The other officers and committee chairmen have maintained an equally busy calendar.

These are only a very few of the myriad duties, projects, and activities undertaken and accomplished by our Auxiliary "Ambassadors for Health." The membership figures are not yet complete for 1968-1969; however, we began the year with a membership of

2,620, 23 of whom were members-at-large, and we usually have an increase in membership of 15 to 50 members. 73 counties are organized into 54 component auxiliaries which are, in turn, organized into 10 Districts. Two of these Districts are 100% organized and 18 of the 54 auxiliaries have 100% membership. One of the two counties that went inactive last year is considering reactivation. The Auxiliary is now big business with nearly \$73,000.00 in sanatoria bed and mental health research endowment funds and in student loan funds. Every penny of this was raised by Auxiliary members, and there are currently 27 students on Auxiliary student loans. The Alamance-Caswell Auxiliary alone, with a membership of 47, has raised nearly \$15,000.00 for local student loans and scholarships in the health careers. We sent tons of drugs and medical equipment for overseas relief; we won a national award this June for our AMA-ERF activities; we won honorable mention from the Southern Medical Auxiliary for our work in the preservation of the history of the medical profession: our quarterly newspaper (which N. C. Blue Cross and Blue Shield very kindly publishes for us gratis), "Tar Heel Tandem", has been lauded as one of the best Auxiliary newsheets in the nation; and the list goes on and on. All credits for the good work and these accomplishments go to your wonderful wives who have worked so tirelessly and well.

Thank you for affording me this opportunity to tell you about some of the activities of your Auxiliary and for all you have done for and mean to us. Sir William Osler has said, "We are here to add what we can to, not get what we can from, life." It is our sincere hope that this sentence describes our Auxiliary efforts.

Mrs. John L. McCain, President, 1968-1969
Auxiliary to the Medical Society of the
State of North Carolina

REPORT OF COUNCILORS

FIRST MEDICAL DISTRICT

The First District of the North Carolina Medical Society has no eventful problems or solutions to report.

Our Post-graduate Extension Series was presented in January and February at Ahoskie, Edenton and Elizabeth City. This was well attended and there seemed to be more interest in affairs of the State Society.

As Councilor I attended all meetings of the North Carolina Medical Society Executive Council. I feel that harmony and understanding among the members is being improved.

The Tri-State Medical Society, as well as the Seaboard Medical Association will again meet at Nags Head in June, 1969.

W. H. Romm, M.D., Councilor

SECOND MEDICAL DISTRICT

As Councilor for the Second District, I have attended all meetings of the Executive Council, and either I or the Vice Councilor have met with all component so-

cieties in discussing the headquarters building proposal. We have had no serious or unusual problems as related to organizational medicine.

Ernest W. Larkin, Jr., M.D., Councilor

THIRD MEDICAL DISTRICT

I am happy to report the Third Medical District had another very successful year. I visited all the component Medical Societies during the year and attempted to explain the problems facing the Medical Society with the implementation of Title XIX, as well as the pressing need for a new headquarters building.

An attempt was made to renew the Third District Medical Society meetings. A joint meeting of the New Hanover County Society and the Third District Society was held in October with Dr. Ed Beddingfield as guest speaker. There was excellent attendance from New Hanover County but only three other District members attended. At that time, it was voted to disband the Third District Medical Society until further need arose for a meeting. The New Hanover County Medical So-

ciety also voted to discontinue its annual symposium at Wrightsville Beach. As Councilor, I have attended the Executive Council meetings held during the year.

Frank R. Reynolds, M.D., Councilor

FOURTH MEDICAL DISTRICT

The Fourth District had a fairly quiet year. There were a few varied and scattered rumblings in regard to the financing of the new headquarters building in Raleigh; however, overall, it was felt to be a fairly satisfactory solution.

One matter arose within the district, which was referred to the Hospital and Professional Relations Committee of the State Medical Society, and it is hoped that this committee will bring forth a satisfactory solution to the problem involved. I attended all Executive Council meetings during the year.

Harry H. Weathers, M.D., Councilor

FIFTH MEDICAL DISTRICT

Considerable interest was exhibited by members of the 5th District component medical societies during the summer and early fall regarding methods of financing the headquarters facility. It was my pleasure to appear before a number of the component societies to discuss this problem, and I appreciated the opportunity of meeting with them and discussing this and other matters regarding the State Society. I feel that such contact was helpful and hope that the final decision made by the House of Delegates at the called meeting in Raleigh in November met with the approval of the majority of the 5th District members.

The annual meeting of the 5th District Medical Society was held at the North Carolina Country Club on October 7, 1968, with fairly representative attendance. The social program consisted of golf for member doctors and their wives, cocktail party in the late afternoon followed by dinner with music and after dinner dancing. The scientific program was presented in the afternoon and included a number of excellent papers presented by members of the Robeson County and Moore County Medical Societies as well as several from visiting guest speakers. These papers were well received and appreciated. At the business meeting that afternoon, presided over by Dr. Roland Pittman of Lumberton, Dr. E. A. Erwin of Laurinburg was installed as President for the coming year, and Dr. Robert F. Willis of Hope Mills was elected as President-elect. In addition Dr. Wilson Staub of Pinehurst was re-elected Secretary and Treasurer. The next annual meeting is scheduled for October 1969, sponsored by the host county society, which will be the Scotland County Medical Society. It is hoped that this will prove as enjoyable and fruitful as have previous annual meetings held in recent years.

Harry H. Summerlin, M.D., Councilor

SIXTH MEDICAL DISTRICT

The following is a very brief report from the Councilor for the Sixth District of the Medical Society of

the State of North Carolina:

1. I have investigated a complaint concerning a physician in Fuquay Springs, North Carolina. This case was inherited from Dr. Glasson but he had not begun to investigate it. The charge was negligence and incompetence and findings were referred to the Mediation Committee of the Society.

2. On October 18, 1968, the Councilor represented the President of the Medical Society at the meeting of the North Carolina Committee on Patient Care. A brief report was submitted at that time.

3. The Councilor was requested to investigate a matter here in Raleigh charging a doctor with abandoning a patient. The findings were submitted to the Mediation Committee for further action. This particular doctor preferred to have an investigation by the Councilor rather than the Grievance Committee of the Wake County Medical Society.

4. The fall meeting of the Executive Council was attended by the Councilor.

5. When the matter of a Society headquarters facility was being debated, it was not necessary for the Councilor to make a formal talk since several qualified members including Dr. Hewitt Rose were present for the discussion. However, letters were sent to the County Medical Societies in the Sixth District informing them of the availability of qualified speakers.

Thomas C. Worth, M.D., Councilor

SEVENTH MEDICAL DISTRICT

There have been no unusual or major issues in the Seventh District since the annual report of 1968.

The problems surrounding the Headquarters Facility of our State Society have created the most interest during the past year. This has been of value due to the resultant increased awareness of the operations of the Society at State level. There are many unsolved situations ahead in this same area and all officers and members should keep informed of the progress of events to insure a concerted effort and mutual understanding.

C. L. Stuckey, M.D., Councilor

EIGHTH MEDICAL DISTRICT

The Councilor has been called upon by the Mediation Committee to investigate and recommend action in two controversial situations between physicians and patients. He also took an active part in the informational campaign prior to the special meeting of the House of Delegates, speaking before three component societies with the help of Mr. Hilliard. He has attended all of the Executive Council Meetings. The Councilor feels that discussions relative to the new headquarters facilities has generated much interest among the membership in all activities of the Society, and it is hoped this interest can be maintained by active participation of more members in the various phases of the Society's work.

Louis Shaffner, M.D., Councilor

NINTH MEDICAL DISTRICT

Most of the activity in the Ninth District was confined to visitations to four of the component County Medical Societies for information on the new headquarters facility. I must say that the interest was excellent; and I believe that the majority of the people just wanted a chance to know first hand what this was all about, even though information had been sent to them in the form of letters and in our State publication. It was a pleasure for me to visit these Societies and the help that Dan Mainor and Bill Hilliard gave me was invaluable. I have also appreciated the notifications of meetings from various societies within the District, notifying me of the time and date of their meetings. Although I was unable to attend any of these meetings, this action on their part was appreciated.

There have been no major problems within the District that were not handled locally. We did not have a District Meeting this year, as it was voted at our last meeting in Morganton that we would not have any District Meetings unless some component County Medical Society requested this and that they be the host Society.

It is my opinion that the discussion and participation engendered by the Headquarters Facility activity has acted as a catalyst to bring the Societies a little closer together, and I think that this is certainly true in the Ninth District.

P. M. Deaton, M.D., Councilor

TENTH MEDICAL DISTRICT

Activities were sharply divided into two categories:—

1)—Participation in movements positively oriented

for the improvements of medical care and the North Carolina State Medical Society.

2)—Attempts to minimize various crisis tending to threaten the quality of medical care and the North Carolina State Medical Society.

In the first category were the following:—

a)—Continuing coordination and liaison between the North Carolina State Medical Society and the State of Franklin Health Council which continues to progress and is serving more and more as a model for active other Comprehensive Health Plans.

b)—Beginning similar activity with the birthing of a "Central Highlands Health Council," which is to embrace the counties lying between the "State of Franklin" and "Eastern Appalachia."

c)—Participation in the State wide effort to spread a better understanding of the State Headquarters facility financing.

d)—Attendance at all formal meetings involving the Executive Council and many informal meetings and conversations relating to all the above ventures.

In the crisis category many hours were spent in conversations and correspondence to try and faithfully represent the interests of the North Carolina State Medical Society and organized medicine in a conflict between members of our Society in Polk County.

In an alleged abuse of Part B of Medicare, by one of our members, there is hope of solution by the involved physician being persuaded to "send bills" instead of "accepting assignment."

Finally, in another county of the 10th Medical District consultation has been given with an attempt to solve, at the county level, a potentially explosive set of grievances.

George G. Gilbert, M.D., Councilor

REPORTS OF COMMISSIONS

ADMINISTRATION COMMISSION

The four committees under this Commission have met regularly and took the action necessary to perform its duties. The Headquarters Facility and Planning Committee under Dr. Hewitt Rose is proceeding with deliberate speed with plans for our new headquarters building, and I would expect the ground breaking sometime this year.

The Professional Insurance Committee is deserving of special commendation for the rather delicate work it does for the Society.

Financially we are in the best shape we have been in in years, due mostly, of course, to the adequate raise in dues voted by the House of Delegates in 1968.

The Retirement Saving Plan Committee is making steady progress in retirement benefits for those members enrolled in the Society's retirement plan.

Wayne J. Benton, M.D., Commissioner

ADVISORY AND STUDY COMMISSION

All of the committees of the Advisory and Study Commission were most active during the past year. The individual reports of these committees have been

submitted separately and I will make no attempt to review their fine work again. The committee meetings at the Annual Committee Conclave at Mid-Pines in September were well attended and all of the recommendations made by the several committees were brought to the attention of the Executive Council. Most of these have been implemented and a few are still in the process of implementation.

The Commissioners suggested to the Executive Council that the committee reports following the Conclave in September be received at a special meeting of the Executive Council not sooner than six weeks following the Committee Conclave. This would give ample time for the Headquarter Staff to transcribe the records of the committee and for the commissioners to prepare the reports for presentation. This recommendation is to be considered at the next Executive Council meeting.

I would certainly like to thank all the Chairmen and the members of the committees for their dedicated work during this past year and their very excellent cooperation.

Marvin N. Lymberis, M.D., Commissioner

ANNUAL CONVENTION COMMISSION

This Commissioner wishes to report that his committees have been active during the year with plans and some change of plans.

The Committee on Scientific Works, chaired by Dr. Warner Wells, is working on the following subjects for the General Sessions programs:

- A. Accident prevention and care.
- B. Medical examiner system for the State of North Carolina.
- C. Manpower needs with regard to allied professions.

It is hoped that Dr. Dwight L. Wilbur, President of the AMA, will appear at one of the General Sessions in May of 1969. This committee has conferred with the Committee on Arrangements with regard to a change in the format of the General Sessions at the Annual Meeting in May. There will be changes which these committees hope will stimulate interest and attendance. Some of these changes are in keeping with the Blue Ribbon Committee No. 1 recommendations.

The Committee on Audio-Visual Post-Graduate Instruction is planning to hold forth again at these well attended meetings. Three of the four sessions last year ran over a hundred members present, with another having seventy three.

The Committee on Scientific Exhibits, chaired by Dr. Chalmers R. Carr is doing its usual fine job in arranging space and improvement in our exhibitor booths. It is hoped many of the problems of previous meetings can be ironed out.

The Committee on Necrology, chaired by Dr. Otis Duck, is planning some change in the Memorial Service Program at the Annual Meeting. There will be a printed program including the names of deceased members. There will be a selected speaker for a short eulogy. All business of the House of Delegates will cease for this brief intermission.

The Committee on Arrangements, chaired by Dr. Charles W. Styron is working with President Welton and other members of his committee to improve the quality of the meetings at the General Sessions in order to make them more meaningful to the membership of the Medical Society. As pointed out by Dr. Paul F. Maness, who preceded me as chairman of this commission, much study is being given to improvement in the Annual Meetings.

The Scientific Awards Committee, chaired by Dr. Lester Crowell, Jr., and the Credentials Committee, chaired by Dr. Charles B. Wilkerson, Jr., will no doubt again come up with a commendable management of their duties.

Lynwood E. Williams, M.D., Commissioner

PROFESSIONAL SERVICE COMMISSION

This Commission is composed of the following Committees:

1. Committee on Blue Shield
2. Hospital & Professional Relations & Liaison to North Carolina Hospital Association

3. Committee to Work with North Carolina Industrial Commission

4. Insurance Industry Committee

5. Committee on OCHAMPUS (Office of Civilian Health & Medical Programs Uniformed Services)

6. Committee on Physical & Vocational Rehabilitation

7. Committee Advisory to N. C. Dept. of Public Welfare

8. Ad Hoc Committee on Task Force on Title XIX

9. Utilization Committee

Individual Committee Reports are included in the Compilation of Annual Reports.

All Committees met at the Annual Conclave held at Southern Pines in September of 1968, except the Committee on Physical & Vocational Rehabilitation. Most of the Committees have of necessity had additional meetings.

Several of the above Committees have as a part of their function a review of claims, that is, a Claim Review Service. Due to this action, it has been necessary for the Committee on Blue Shield to establish sub-committees which meet monthly. Due to the time involved the members of these Committees receive partial compensation for their duties from North Carolina Blue Cross & Blue Shield, Inc.

The Claim Review Service of the Insurance Industry Committee has been reviewing some Medicare claims, most of which have been involved with "utilization" rather than fees.

The Committee Advisory to the N. C. Dept. of Public Welfare has been very involved with the North Carolina Department of Public Welfare and N. C. Blue Cross & Blue Shield, Inc. in initiating a plan for payment of physicians' services for welfare clients—this program earmarked for the first 6 months of 1969 only, but from which it is hoped data will be accumulated which will be helpful later in the implementation of Title XIX. This program thus far has caused much confusion, most of which we hope can be worked out in the near future.

J. Henry Cutchin, Jr., M.D., Chairman

PUBLIC RELATIONS COMMISSION

All the Committees under the Public Relations Commission met at the Mid Pines Conclave in September. Reports have been submitted to the Executive Council and can be found in the Compilation of Annual reports.

The Medical Legal Committee, under Dr. Julius Howell, in conjunction with the North Carolina Academy of General Practice and the North Carolina Bar Association, held a Seminar in Raleigh which was well attended and most informative.

The annual Officers Conference was held in Pinehurst on January 24 & 25 under the direction of our Public Relations Commission and again presented timely topics of interest. The Conference stressed the value of organized medicine and its public relations. Philip Lesly, public relations counsel for the AMA, was a featured speaker as well as a report given on the

legislative scene in Washington by Darrell Coover of Washington AMA Office.

The Legislative Committee is most active this year in proposed legislation under Title 19 and has their work cut out for them. Dr. Boyette and his Rural Health Committee continues a most active program.

The Commissioner would like to take this opportunity to thank the committee chairmen and all mem-

bers of the committees for their continued effort in helping to carry out the functions of our State Society.

Philip Naumoff, M.D., Chairman

PUBLIC SERVICE COMMISSION

Report not received 4/15/69

REPORTS OF COMMITTEES

COMMITTEE ON AMERICAN MEDICAL ASSOCIATION EDUCATION AND RESEARCH FOUNDATION (AMA-ERF)

Membership of the Committee consisted of:

William L. Fleming, Chairman

Eben Alexander, Jr.

Jack S. Billings

Thomas C. Bost

Ralph B. Garrison

Benjamin F. Huntley

Ralph S. Morgan

William P. J. Peete

A. J. Tannenbaum

Vernon W. Taylor, Jr.

The Committee met on September 25, 1968 at Southern Pines along with Commissioner Marvin Lymberis and staff assistants of the Society.

Activities of the Committee in 1967-1968 were reviewed at the meeting including suggestions made by the Committee through Mr. Richard Nelson of the AMA staff concerning the need for clarifying and possibly changing the function of National AMA-ERF. The program of the Committee for 1968-1969 approved at this meeting has been carried out as follows:

(1) Letters were sent out in the late fall to all members of the state society urging contributions to AMA-ERF.

(2) Letters were sent out in the late fall to North Carolina physician graduates of out-of-state Medical schools urging contributions through AMA-ERF to one or more of the three North Carolina Medical Schools.

(3) Clarification of the function of National AMA-ERF was urged.

(4) Consideration of the termination of this standing Committee and carrying out its present limited functions by the staff of the State Society has been suggested.

William L. Fleming, M.D., Chairman

COMMITTEE ON ANESTHESIA STUDY

The Committee on Anesthesia Study met with its Commissioner at Mid Pines Club, Southern Pines, N. C. on September 26, 1968. The following members were present: Luther C. Hollandsworth, M.D., Chairman; John R. Hoskins, M.D.; Arthur E. Davis, M.D.; Joseph F. Patterson, M.D.; Bill Joe Swann, M.D.; and Marvin N. Lymberis, M.D., Commissioner. The meeting was

called to order by the Chairman. New members introduced to the Committee were Drs. Joseph F. Patterson and Arthur E. Davis, who were present, and Dr. Michel Bourgeois-Gavardin, who was unable to attend. A review of the functions of the Committee on Anesthesia Study was given by the Chairman in order to bring the Committee's activities up to date for the benefit of the new members.

A review of the minutes of the 1967 meeting, held at Mid Pines Club, Southern Pines, N. C., was disposed of.

A discussion of the low compliance rate on return of questionnaires followed. From October 1961 through October 1968, exactly 50% of submitted questionnaires have been returned by the physicians. Further discussion of this matter dwelt on the hiring by the State of North Carolina of a new Medical Examiner, Dr. Page Hudson, and the possibility that he might aid the Committee on Anesthesia Study in obtaining returns on certain questionnaires of particular interest. Subsequent conversations with Dr. Page Hudson indicate that there may be help available in obtaining returns on those cases involving deaths during surgery or anesthesia. At the present time though, there are only 26 counties represented by Medical Examiners, and Dr. Hudson thought it might be a year or more before most of the counties would be represented. This matter is being given further consideration, and will certainly be explored when counties are more fully represented in the Medical Examiner system.

For the group's consideration, Dr. Swann presented a revised form of the questionnaire now being used. It was explained that it was more in line with how procedures are done and possibly might increase return of the surveys. A discussion followed, and it was decided that all members of the Committee should be sent a copy of the revised form as well as a sample of the old form for consideration.

Following this discussion, a review of 18 cases ensued. The remainder of the cases previously mailed to Committee members were to be evaluated and returned by mail. In the period extending from October 1961 to October 1968, a total of 1036 questionnaires has been submitted to physicians by this Committee. Of this number, 161 were considered by the Committee to represent preventable deaths from the standpoint of anesthesia. Preventability was questioned in an additional 57 cases.

Luther C. Hollandsworth, M.D., Chairman

COMMITTEE ON ARRANGEMENTS

The Committee on Arrangements met on Thursday, September 26, 1968, at 1:00 P.M. with Dr. Charles W. Styron presiding.

The dates for the annual meeting are May 17 to May 21, 1969.

Letters of advice and criticism for change in the annual meeting were read. Specific letters were considered from Dr. Michael Kelleher, Dr. Louis Shafner, Dr. Jack Hughes, and Dr. David Welton. Each suggestion for change in the letters was noted, discussed, and in some manner will be acted on in 1969 and in 1970.

The Medpac dinner was approved for Monday, May 19, at 7:00 p.m.

The presentation of certificates for the 50 Year Club will be moved to the Third General Session confined to a preliminary announcement only and presentation.

It was recommended that the President's words of acceptance upon installation be changed from an address to a three minute statement. The President has an opportunity to speak in detail the following day.

The Memorial Program at the First House of Delegates meeting on Sunday, May 18, 1969 will consist of a printed brochure of names appropriately designed with a frontispiece, medical aphorism, and brief statement and an address of five minutes by a selected speaker. This will be done if acceptable to the committee on Necrology. Later Dr. Otis Duck approved this format.

After an extended discussion on the problem of attendance at general sessions, it was decided that the sections should meet from 9:00 to 11:00 on Monday, Tuesday, and Wednesday and the general sessions from 11:30 to 12:30 on the same days. The afternoons will be left open for non-scheduled work, recreation, committee meetings, and other business of the society. This plan was discussed with Dr. Warner Wells and accepted.

The Surgical Section will have a change in meeting area as requested. However, the facilities used last year must be utilized this year because of the limited space.

There was a discussion of changing the days of the meeting, but commitments are made through 1971.

It was suggested that the Pine Needles Club be used for auxiliary functions if facilities are available. This is to be investigated.

The President's reception is to be, as usual, by invitation.

Entertainment is to be arranged by Dr. Welton and Mr. James Barnes.

Negotiations are in process for Mr. Dumont Roseman for his services in press coverage.

The Committee expressed regret at conflicts of alumni functions and other functions. These conflicts are apparently unavoidable. Corrections may be avoided by making the afternoons free.

Dr. Dwight Wilbur, President of the American Medi-

cal Association, will speak at the Second General Session on the invitation of Dr. Welton.

Charles W. Styron, M.D., Chairman

COMMITTEE ON ASSOCIATION OF PROFESSIONS

The North Carolina Association of Professions has made great strides the past year under the able leadership of President, W. J. Smith, R. Ph. of Chapel Hill. Major emphasis has been given to: Membership Increase; Publicity; Cooperation with State Agencies; and expanding involvement of the Association's leadership by the appointment of CONSULTANTS.

The Medical Society was the first member group to appoint Consultants in addition to the six members to the Board of Directors. This extra contact with practitioners proved so valuable that the other five member groups have, this past year, made similar appointments. The By-Laws of the Association limits the members of the Board of Directors to six members each—and the appointment of Consultants gives a broader base for membership participation.

The Board of Directors has held four quarterly meetings and the Executive Committee has met each month to plan and carry out recommendations of the Board. The Annual Meeting was held in Raleigh on February 20th at the Velvet Cloak Inn. This meeting was well attended, both for the afternoon Business session and the evening banquet. Guest speakers were: Samuel H. Johnson, Representative from Wake County for the afternoon business meeting and Attorney General Robert Morgan for the banquet session.

Legislative Study and Proposal

One of the primary projects for the Association this past year has been the study and preparation of a proposed Bill to have introduced in the 1969 General Assembly allowing the professional practitioner to "Incorporate" and practice, business-wise as a Corporation—which in North Carolina has not been made clear—whether he could or could not. Working with the legal counsels of each state member professional group plus the ardent work of the Association's Professional Corporation Committee, headed by John S. Rhodes, M.D. of Raleigh—a proposed Bill was prepared and presented at the Annual Meeting in February. Mr. Sam Johnson introduced the Bill in the House and Senator William Staton of Lee County introduced the same Bill in the Senate. Referral was made to appropriate Committees and Hearings will be scheduled in March.

Dr. Rhodes' committee deserves special recognition for the time and effort they spent in getting this proposal ready for introduction in the 1969 General Assembly. This one project has helped to stimulate increased interest in the Association and has helped boost the membership during 1969.

Education & Public Relations

Another major project was the DRUG ABUSE SEMINAR which was held in Chapel Hill, November 13 and 14th at the Institute of Pharmacy. Mr. Smith worked closely with the State Bureau of Investigation and with the N. C. Highway Patrol in this cooperative

program—to which members of all three groups were invited to attend. Registration had to be limited to 100 persons as the Auditorium could seat this number. It was filled with requests turned down. The Medical Society Committee on Drug Abuse participated on the program which brought even greater involvement with the Medical Society members.

Special emphasis was given to the Educational aspects of a Drug Control Program—and Counselors and Student Personnel Directors for the Community and Senior Colleges across the state were invited to attend the November Seminar. The colleges were well represented.

The publicity given this program was disseminated across the state with three TV interviews given by WTVD-TV in Durham. Newspaper publicity was wide spread and the interest created by this Seminar has been encouraging. Follow-up to this program is evidenced by local pharmacy groups sponsoring films and discussions in local communities and on college campuses. The response by students and faculties has been positive.

TV Series:

A second Educational emphasis for the spring of 1969 has been the re-programing over WUNC-TV Educational network of the six video tapes, prepared and produced in 1968. Each member group prepared and paid for its own 30-minute taped program on recruitment and career promotion. The interest created by the state-wide programs in 1968 was great enough to request a repeat for 1969. In addition to the tapes being put on state-wide educational TV, the Directors of Guidance have been co-sponsoring this effort and getting groups of students to meet together with local practitioners to view the film programs and to meet together with local practitioners to view the film programs and to hold question and answer sessions following. The cooperation of the schools and the local practitioners has been excellent. It is planned to move into local areas, not covered by WUNC-TV—and have the local television stations run the series of tapes and have follow-up with local students, guidance counselors, and practitioners meeting together in the interest of career promotion.

MEMBERSHIP: Each member group has been urged to promote membership in the Association of Professions during the year. The result: a total of 614 members by the end of 1968—reaching a GOAL OF 600—set a year ago. Membership for 1969 has been set for 1000 members. With the help of the Executive Offices and the Consultants, plus Board and Committee members—this goal should be reached.

R Ph.—152

D.D.S.—115

D.V.M.—68

P.E.—110

M.D.—97

A.I.A.—72

A BONUS for Association members was the opportunity to join a Tour Group to Spain the last of February, 1969. Other travel opportunities will be offered

in 1969 as the response to this first trip was far greater than expected. We hope to have more of the North Carolina members taking advantage of these group tours in the future. Dr. and Mrs. Fleming Fuller of Kinston did go on the Tour to Spain in February.

The new officers for the Association elected and installed at the 1969 Annual Meeting, February 20th were:

PRESIDENT—L. P. Megginson, Jr., D.D.S. High Point
First Vice-President—John S. Rhodes, M.D., Raleigh
Second Vice-President—Edward G. Batte, DVM, Raleigh
Secretary—Vernon F. Lewis, A.I.A. Burlington
Treasurer—William H. Wilson, R.Ph. Raleigh
Member of the Executive Committee—Robert G. Carson, P.E., Raleigh

The Medical Society's members of NCAP Board of Directors are:

George G. Gilbert, M.D., Asheville
 Thomas G. Thurston, M.D., Salisbury
 Philip Naumoff, M.D., Charlotte
 John C. Hamrick, M.D., Shelby
 John S. Rhodes, M.D., Raleigh
 John R. Kernodle, M.D., Burlington

Consultants are:

Dewey H. Bridger, M.D., Bladenboro
 Ernest H. Brown, Jr., M.D., Lumberton
 H. Fleming Fuller, M.D., Kinston
 Thomas P. Nash, III, M.D., Elizabeth City
 Walter T. Tice, M.D., High Point

John R. Kernodle, M.D., Chairman

COMMITTEE ON POSTGRADUATE AUDIO-VISUAL INSTRUCTION

The Committee on Postgraduate Audio-Visual Instruction met on September 26, 1968, at Mid Pines, Southern Pines, North Carolina.

The program for the 1969 meeting of the State Medical Society in Pinehurst, North Carolina, May 17-21, 1969, was discussed and planned.

The final program for the 1969 meeting is recorded in the program for the Annual Session and was distributed with the April issue of the Public Relations Bulletin.

J. C. Grier, Jr., M.D., Chairman

COMMITTEE ADVISORY TO THE AUXILIARY

It is always a great privilege and pleasure to make my annual report on the Auxiliary for we can see so many things that have been accomplished in the past year through the programs provided by the President. During this year the President has presented programs of great variety and interest with much to be accomplished.

The President's theme for 1968-1969 was, "Ambassadors for Health." Even the title for the year might have made you ask yourself the question, "just what can I do as an 'Ambassador for Health'?" As the year draws to a close, we can see what we have learned and the things we have done through the projects un-

dertaken by the Auxiliary. Among the most important are:

- I. Membership.
- II. Endowment Fund.
- III. A nurse refresher course in cooperation with local technical institutes.
- IV. The encouraging of licensed drivers and others who do not drive to carry emergency medical identification information.

V. Pushing toward the early completion of the Mental Health Research Endowment Fund.

As your Chairman, I am particularly interested in these and it is my hope that each member of the Auxiliary has selected a portion that specifically fits her capabilities and that she has become an "Ambassador for Health."

ARCHIVES OF MEDICAL SOCIETY HISTORY

We are indeed "on the home stretch." The editor has been laboring earnestly since my last report and it is our hope the first "History of the Medical Society of the State of North Carolina" will be ready for the press at an early date.

Roscoe D. McMillan, M.D., Chairman

BLUE RIBBON NO. 1 COMMITTEE REPORT NUMBER THREE

Since Report Number Two, dated March 16, 1968, the Blue Ribbon No. 1 Committee has held two meetings: September 26, 1968, and January 25, 1969.

In the September 26th meeting, publications of the Medical Society were carefully reviewed. The Editor of the Journal, the Executive Director of the Medical Society, and the President of the Medical Society were present in the meeting. The Committee made recommendations at the close of that meeting, the most significant of which is that the Committee approved the publication of the Journal as to its content and its financial operation.

At the Annual Meeting of the Medical Society in May, 1968, the Blue Ribbon No. 1 Committee was charged to further study the feasibility of a survey of Headquarters Operations, its financial costs, and organizations capable of performing such a survey.

On January 25, 1969, with the Executive Director of the Medical Society and the President of the Medical Society in attendance at the meeting, the Committee made the recommendation to the Executive Council that the firm of Rothrock, Reynolds and Reynolds, Incorporated, Management Consultants, be employed to conduct the Headquarters survey in conformity with a prospectus presented to us prior to that time by Mr. Michael Pearson of that organization.

The Committee has elected to continue its overall study of the entire structure of the State Medical Society, with an attempt to analyze committee structure.

Jesse P. Chapman, Jr., M.D., Chairman

COUNCIL ON PLANNING (Blue Ribbon No. 2 Committee)

This group, established during the 113th administrative year of the Medical Society of the State of North

Carolina, is made up of the ten living Past Presidents most immediate in the order of their year of service, the Current President, the Current President Elect, and the Constitutional Secretary, plus the Executive Director of the Society.

One formal meeting of this Council has been held during this administrative year thus far. Arising out of this meeting, several suggestions were made to officers, committee chairmen, and the Executive Council. Some of these thoughts were incorporated into recommendations of some of the committees and a part of the actions of the Executive Council during the Fall Conclave at Mid Pines.

A number of informal consultation services have been provided by members of the Planning Council upon request when a question of intermediate or long-range planning was involved.

A second formal meeting of this Council is projected for February, probably subsequent to the deadline for report submissions for the compilation.

This Council is not Commission assigned and will make its Annual Report to the Society directly to the President and to the Executive Council at the time of the Annual Meeting.

Frank W. Jones, M.D., Chairman

COMMITTEE ON BLUE SHIELD

Your Blue Shield Committee held regularly scheduled meetings every other month during the past year at various North Carolina locations. In addition the Claims Review Subcommittee held ten meetings and adjudicated an average of twenty special consideration cases at each of these meetings. The Committee is pleased to report that Dr. Robert A. Ross, Past President; Dr. David G. Welton, President; Dr. Edgar T. Beddingfield, President-Elect; Dr. J. Henry Cutchin, Jr., Commissioner; and Mr. James T. Barnes, Executive Director; met with the Committee one or more times and their interest, advice, and counsel was much appreciated. Following is a summary of major events and activities of the past year.

1. DEVELOPMENT OF NEW BLUE CROSS AND BLUE SHIELD BENEFITS BY THE CONSOLIDATED CORPORATION—The former Hospital Saving Association of Chapel Hill and Hospital Care Association of Durham merged into the consolidated Corporation, North Carolina Blue Cross and Blue Shield, Inc., effective January 1, 1968. During the past year the Corporation's staff has devoted much time to the development of a new certificate and entirely new pattern of benefits which was released for sale on January 1, 1969. During 1969 the Corporation will endeavor to convert all existing subscribers to benefits of the new certificate.

A portion of each meeting during the past year was devoted to study of the new benefits as they were developed and thus the Committee was able to give considerable professional guidance to the Corporation in planning the new coverages. The new benefits will greatly expand coverage for non-hospitalized services.

All subscribers will have 100% coverage for treatment of outpatient accidents, treatment of medical emergencies, radiation therapy, and 80% benefits for diagnostic x-ray and laboratory procedures. The Corporation has developed a balanced coverage for professional benefits so that all subscribers will have outpatient, surgical, and inpatient medical benefits as well as hospital coverage. Extended Benefits or Major Medical coverages providing benefits for office visits, prescription drugs, nursing home care, appliances, etc. are available on an optional basis. While there will be a range in the level of surgical and inpatient medical coverages, the two will be commensurate one with the other. Inpatient medical benefits will provide benefits for intensive care, consultations, and prolonged detention. Medical benefits will be paid in addition to surgical allowances for diagnostic surgical procedures during the same admission.

Scheduled surgical benefits will be based on the unit values of the Relative Value Studies adopted by the State Medical Society and scheduled inpatient medical benefits are based on the per diem allowances of the Professional Services Index of the National Association of Blue Shield Plans. These are indemnity allowances toward physicians' charges with the patient being responsible for any difference between charges and benefits. Many benefits under the outpatient section of the certificate including radiology, clinical laboratory, and treatment of accident injury and medical emergencies are paid on the basis of usual, customary and reasonable charges. The Corporation will also offer surgical and inpatient medical benefits on a UCR basis in the near future.

The new benefits on a scheduled fee basis do not incorporate an income limit or "service benefit" feature and all such former coverages will be phased out in the conversion process.

The Committee is pleased with the newly developed Blue Shield benefits and believes that this coverage will make North Carolina a leader among Blue Shield Plans.

II. NEW NATIONAL BLUE SHIELD PLAN STANDARDS, FUTURE BLUE SHIELD—MEDICAL SOCIETY RELATIONSHIP, AND ADMINISTRATION OF USUAL, CUSTOMARY AND REASONABLE CHARGE PROGRAMS—In October, 1968 the Chairman and Vice-Chairman of the Committee attended a National Blue Shield meeting in Chicago in company with Dr. John S. Rhodes, Chairman of the Medical Society Ad Hoc Committee on relationships with North Carolina Blue Cross and Blue Shield, Inc.; several physician members of the Corporation's Board of Trustees: Mr. McMahon, President; and Mr. Beeston, Vice President of the Corporation. At this meeting delegates voted to require that each Blue Shield Plan offer benefits on the basis of usual, customary and reasonable charges as a new standard for approval as a Blue Shield Plan. It is now required that all Plans make such benefits available to subscribers who wish to purchase them but does not prohibit sale of scheduled indemnity coverage to other subscribers. UCR benefits may be sold with 100% benefits or at a lesser percentage of benefits.

National Blue Shield also stressed the importance of making Blue Shield benefits more comprehensive and developed a list of twenty-four professional services which Plans are asked to make available by April 1, 1969. It is interesting to note that the new certificate benefits of the consolidated Corporation either through basic or supplemental coverage already offer benefits for twenty-two of the twenty-four services excepting only routine physical examinations and vision care (eye refraction).

Your Chairman has met with Dr. Rhodes' Study Committee on several occasions and the Blue Shield Committee stands ready to cooperate fully with this Committee and the Physician Trustees of the Corporation to develop any required changes in the functions of the Blue Shield Committee under the Constitution and By-Laws of the State Medical Society and to develop any required new "Statement of Understanding" between the Medical Society and North Carolina Blue Cross and Blue Shield.

III. CLAIMS REVIEW SUBCOMMITTEE AND RESPONSIBILITIES UNDER THE NEW NORTH CAROLINA DEPARTMENT OF PUBLIC WELFARE PHYSICIANS' PAYMENT PROGRAM—The Claims Review Subcommittee met monthly during the past year. At the present time the review subcommittee is composed of Drs. Bigham, Crouch, Davis, Hollandsworth, and Wilson. Approximately 250 claims were adjudicated. Any claim review decisions involving an important precedent or schedule modification were referred to the full Committee for final determination. Claims were reviewed at the request of individual physicians or the Corporation when there was a difference of opinion as to extent and amount of benefits or when there was a procedure or service for which benefits had not been established. The members of the subcommittee have consulted freely with leading specialists on an informal basis when specialized knowledge or opinion was needed. In addition to determination of allowances for professional services, the Committee in some cases dealt with matters involving questions of extent and duration of medical services in accordance with the functions of the Committee as defined in the Constitution and By-Laws of the Medical Society which extends the Committee responsibility to professional determinations in conjunction with administration of the Corporation's coverages for hospitalization, nursing home care, extended and major medical coverages.

In December, 1968 Dr. David G. Welton, President, assigned to the Blue Shield Committee an additional adjudication responsibility in conjunction with the new state program providing physicians payment for eligible Department of Public Welfare beneficiaries. Under this program, North Carolina Blue Cross and Blue Shield receives claims reports from physicians and records the type and number of services, the physician's charges, and assigns relative value units in accordance with the Relative Value Studies adopted by the State Medical Society. When requested to do so by reporting physicians or the Corporation, the Committee will adjudicate relative value units assignment. The amount of money to be paid by the North Carolina Welfare Department is determined by creation of a

conversion factor derived by dividing total assigned relative value units into available state funds for a given period of time. Since this program was initiated January 1, 1969, few claims were received by February and it is too early at this February writing to ascertain the amount of time and effort that will be required to fulfill this responsibility.

Dr. William T. MacLauchlin, Chairman of the Medical Society Committee Advisory to the North Carolina Department of Public Welfare, has responsibility under his Committee for liaison with the state and Blue Cross and Blue Shield in matters of administration not relating to claims adjudication. Your Chairman attended one joint meeting with Dr. MacLauchlin's Committee and representatives of the Department of Public Welfare and the Corporation to plan the announcement mailings of the new program.

As skill and experience of the Claims Review Subcommittee has increased and claims situation precedents have been established, the Committee has been able to keep up with the volume of cases by half-day monthly meetings. It is anticipated that as more coverage is changed to a usual, customary and reasonable basis and as more subscribers and programs are involved, that additional subcommittees or more frequent meetings may be necessary. The Committee will continue to study this matter and make recommendations to the officers, councilors, and delegates of the Society as circumstances may dictate. One procedure being given consideration is to request the appointment of local Blue Shield advisory subcommittees on a county society or Medical Society district basis.

IV. OTHER MATTERS OF INTEREST—The Committee is pleased to report that the Corporation is publishing a Blue Shield newsletter each 60 days which is mailed to physicians and which is designed to keep physicians and their office assistants up-to-date with regard to Blue Shield developments, benefits and claims processing. The Committee is also pleased to report that under the Corporation's Division of Blue Shield Activities, the Corporation has appointed a manager of Professional Relations and five Professional Relations representatives assigned to specific geographic areas. These men will be available to call on doctors' offices to assist them and their medical assistants with respect to all programs sold or administered by the Corporation. With these additional resources, the Corporation will thus be able to hold more workshop training classes for medical assistants and maintain closer liaison with physicians, county medical societies, and hospital staffs.

Mr. E. B. Crawford, former President of Hospital Saving Association of Chapel Hill, and Mr. E. M. Herndon, former President of Hospital Care Association of Durham, retired effective January 1, 1969. The Committee is grateful for its opportunity to be associated with these fine gentlemen over the years and joins many other persons and organizations in North Carolina in expressing its appreciation for their pioneer work and to wish them every success and happiness during their retirement.

Roy S. Bigham, Jr., M.D., Chairman

COMMITTEE ON CANCER

The Committee met September 8, 1968, Southern Pines, N. C., and received a report of the Ad Hoc Committee Meeting May 5, 1968 of the Committee on Cancer and The State Board of Health in regard to the State Board of Health Cytology Program. A recommendation was made to the Executive Council (which was passed) that the State Board of Health in cooperation with the North Carolina Society of Pathologists would discontinue accepting Papanicolaou smears from private patients in the State Board of Health Lab. Another meeting of this Ad Hoc Committee with Dr. Burns Jones in Raleigh, December 19, 1968 resulted in a program by the State Board of Health entitled "Protocol For Procedural Changes in Cancer Screening Program" with the cooperation and assistance of the North Carolina Society of Pathologists.

The Committee recommended to the North Carolina Regional Medical Program, in cooperation with the Governor's Cancer Commission, the publication of a yearly book describing all the existing facilities for diagnosis, treatment and service to cancer patients in North Carolina.

The Blue Cross and Blue Shield were congratulated on their recent television advertisements stressing the importance of Papanicolaou smears for cancer detection.

Throughout the year the Committee worked closely with the N. C. Regional Medical Program, the N. C. Division of the American Cancer Society, the N. C. Cancer Institute, and the Governor's Commission to Study the Cause and Control of Cancer in North Carolina.

The Committee recommended to the State Board of Health that sigmoidoscopy be included in the Cancer Detection Clinics.

Washington County Hospital, Plymouth, N. C., Granville Hospital, Oxford, N. C., and J. Arthur Dozier Memorial Hospital, Southport, N. C. were approved for participation in the Cancer Hospitalization Program of the State Board of Health.

D. E. Ward, Jr., M.D., Chairman

COMMITTEE ON CHILD HEALTH AND IMMUNIZATIONS

The Committee on Child Health and Immunizations held its annual meeting September 26, 1968 at the conclave of Committees of the Medical Society of The State of North Carolina at the Mid Pines Club, Southern Pines, N. C.

The extent of use of measles vaccine in the child population in North Carolina was again reviewed, along with methods of further extending the use. Mr. Henry Woodard of the Immunization Activity Program of The State Board of Health reported on estimates of numbers having received the vaccine across the state and told of support and help from practicing physicians. Early indications point to the fact that the incidence of the disease is down, with epidemics being curbed or prevented.

Dr. Ronald Levine of The State Board of Health reported on the Rubella vaccine study, previously en-

dorsed by this committee, to be carried out in certain counties as a pilot study.

Other matters relating to improving child care, immunization programs, and clarification of some points of confusion impeding various projects were discussed.

Richard S. Kelly, Jr., M.D., Chairman

COMMITTEE ON CHRONIC ILLNESS

The Committee on Chronic Illness had two meetings during the present year.

The first meeting was held at the time of the annual Committee Conclave at Mid Pines on September 26, 1968. Dr. C. E. Buckley, III, reporting on the audiovisual patient education program, showed a pilot film on emphysema produced through a grant from the North Carolina Tuberculosis Association. It is anticipated that the use of audiovisual aids can be very helpful to the practicing physician in terms of increasing the knowledge of the patient about his state of health, improving the patient's understanding of his treatment program, and saving the time of the physician. The committee again endorsed the work of the audiovisual patient education program. Dr. Robert L. Wood, assistant health officer of Orange, Person and Chatham Counties Health Department, reported on multiphasic screening in Person County covering the period October, 1967, through June, 1968; this is being done as a pilot project testing mechanisms that may help the private physician in detecting hitherto unsuspected diseases in his patient population as well as the population at large. Similar projects have been in operation in the following areas: Sylva, Asheville, Durham, and Wake County. The committee will continue to review the operation of these projects.

The committee approved the pamphlet "Thinking About A Nursing Home" for distribution through the headquarters of the Medical Society upon request.

President-elect, Dr. Edgar T. Beddingfield, reported on certain problems currently arising from the presence of large numbers of unused beds in the tuberculosis hospital system. State law prohibits the use of these beds for any condition other than treating tuberculosis or other similar diseases of the lungs.

Dr. T. F. Kelley reported on the 21st annual conference on ageing held in August 1968 in Ann Arbor, Michigan, which he attended as a representative of the committee.

the Committee on Chronic Illness should have a special concern about the long-range planning for the future health needs of the aged and chronically ill, and that the committee should strive to find problem areas which exist now in this field as well as attempt to anticipate particular areas of needs which may arise in twenty or thirty years. With this in mind, the chairman was instructed to plan a winter meeting with Dr. Edward W. Busse, director of the Center for the Study of Ageing at the Duke University Medical Center.

The committee held its second meeting on January 22, 1969, with Dr. Busse and members of his staff in Durham. Topics discussed included problems in

the care of patients in nursing homes, trends in organization and operation of nursing homes, relationships between nursing homes and hospitals, problems in the home care of the chronically ill and the home health aid. In addition, Dr. Busse and his staff gave the committee a resume of the chief fields of interests and activities of the Center for the Study of Ageing at Duke.

J. Dewey Dorsett, Jr., M.D., Chairman

COMMITTEE ON COMMUNITY HEALTH (RURAL & URBAN)

The Committee on Community Health had two regular meetings during the year which reviewed many of the problems of community health, and subcommittee on arrangements for a Rural Health Conference to be held at Lake Junaluska in June, 1969, was also held.

The Committee forwarded to the various counties health certificates for the Health King and Queen of their county and a subscription to "Today's Health" is presented to the high school library of these winners. Also the Medical Society sponsors the trip to Chicago to the annual 4-H convention of one of the state 4-H Health winners.

One member of the Committee has had two articles published in the "Farm Bureau Magazine" concerning health.

The committee has been interested in Traffic Safety, and also Water Pollution, Immunization, School Health, and many other areas of community health.

The committee also has been interested in the area of obtaining General Practitioners, and a resolution submitted by this committee to the Executive Council and subsequently adopted by the House of Delegates of this Society, was subsequently presented to the AMA and in substance approved. This committee is encouraged in that the Council on Medical Education of the AMA has now acted and created a specialty—The American Board of Family Practice. It is felt that this will be a stimulus toward obtaining family practitioners.

The committee chairman presented a talk on "Family Practice" to the SAMA Chapter of Bowman Gray. This talk was well received and it appears there is interest in family practice.

The areas mentioned above still are areas of concern of this committee. Facets of Community Health as related specifically to the impoverished should become an increasing concern of this committee.

The next year should present many challenging problems to this committee.

Edward L. Boyette, M.D., Chairman

COMMITTEE ON CONSTITUTION AND BY-LAWS

In its report to the House of Delegates, the Committee will submit for final action a proposed change in the Constitution relative to amending the Constitution. In addition, there will be at least three proposed changes in the By-Laws. One will set up an Education

Committee as authorized by the last House of Delegates. Another will set up a new commission to bring together all committees having to do with governmental health programs. The third will set up a mechanism for ranking alternates to the AMA House of Delegates.

Louis Shaffner, M.D., Chairman

COMMITTEE ON CREDENTIALS

The Committee on Credentials reports immediately following the convening of the House of Delegates on May 18, 1969, to certify to the House of Delegates a quorum of registered Delegates.

The Committee on Credentials had the duty of certifying Delegates at the called meeting of the House of Delegates on November 10, 1968, Sir Walter Hotel, Raleigh, N. C., where a roll call vote count was made for the record.

Charles B. Wilkerson, Jr., M.D., Chairman

COMMITTEE ON DISASTER MEDICAL CARE

Since the last report of this Committee, there was staged in Durham, on April 5-6, 1968, a National Meeting of the A.M.A. Committee on Disaster Medical Care. During the time of this meeting events in Memphis, Tennessee, which culminated in the death of Dr. Martin Luther King, resulted in Civil Disorder in Durham, Raleigh and many other North Carolina communities. This incident had a profound effect on the course of the meeting and on the participating physicians. It pointed up clearly an added responsibility to all agencies responsible for emergency medical services.

A questionnaire to all component societies requesting information as to the adequacies of Emergency Room Services was sent out in conjunction with the State Committee on Hospital and Professional Relations. Unfortunately, the returns were both incomplete and scattered. This may be because the questionnaires were received during the summer months when, because of vacations and outside activities, a poor response could be expected. The need for such a survey—preferably by a competent, disinterested group—is, however, evident.

Civil Disturbances, Training of Ambulance Personnel, Surveillance of Hospital Emergency Rooms and Communications were topics discussed at the Conclave in Southern Pines. At the conclusion of the meeting, two resolutions were adopted as a result of these discussions:

RESOLUTIONS:

I. The Disaster Medical Committee asks the North Carolina Medical Care Commission to strengthen its efforts in licensing hospitals with respect to the emergency room services in the hospital it licenses, particularly with reference to availability of physicians to those emergency rooms, and establish minimum standards of care with reference to other personnel and equipment.

II. Eventually a statewide method of testing will

have to be set up, upgrading courses and testing of ambulance personnel; therefore, the Disaster Medical Care Committee recommends that a standard test for licensing or certifying ambulance personnel be set up, given and administered by the State Board of Health.

George A. Watson, M.D., Chairman

COMMITTEE ON SCIENTIFIC EXHIBITS

The Committee on Scientific Exhibits met on Tuesday, January 7, 1969 in Charlotte and selected exhibits for the forthcoming Annual Meeting.

A number of good exhibits have been selected and we look forward to a good scientific display for May, 1969.

Chalmers R. Carr, M.D., Chairman

COMMITTEE ON EYE CARE AND EYE BANK

The Committee on Eye Care and The Eye Bank met in September at the Committee Conclave in Southern Pines.

The relationship of Ophthalmology and Optometry was reviewed, and minutes of the informal meeting between members of this committee and the Optometric Board were discussed. While the Committee felt that all patients with unexplained visual loss should be referred for further evaluation, the "20/40" clause on the optometric part of the Blind Commission form has served little purpose in actual practice. It was recommended that this clause be eliminated.

The Uniform Anatomical Gift Act was reviewed, and, with certain suggestions for change, the Committee endorsed the Act and recommended that it be accepted by the Legislative Committee.

We felt that all contact lens patients should be examined and supervised by ophthalmologists during the initial fitting and break in period. The Committee therefore suggests the written notation "contact lens patient" on all prescriptions sent to opticians for contact fitting. We again stated the Committee's firm belief that all eyeglass prescriptions should be given to the patient to insure freedom of choice in purchasing such eyeglasses.

Recent changes in medical school curricula in North Carolina have limited the time medical students spend in the departments of ophthalmology. Since this Committee is concerned with the continuing supply of trained eye doctors, particularly in the poorly populated areas of the State, we feel that these changes are not in the best interest of medical care. The Committee requested a continuing study by the Chairman and for a report at the next meeting.

During the past year the Committee has informed all of the ophthalmologists in North Carolina of problems facing our specialty. We have asked for and received expressions of opinion that have helped us in making our decisions.

Shahane R. Taylor, Jr., M.D., Chairman

COMMITTEE ON FAMILY AND MARRIAGE COUNSELING

At the September (Mid Pines) meeting there was substantial agreement that programs (institutes, post graduate courses, etc.) devoted exclusively to sex, marriage, and family problems were poorly attended by doctors. This being true, the committee decided against organizing or sponsoring any such programs in North Carolina during the current year.

The committee noted with satisfaction, however, that single presentations concerning sex, marriage, and the family were appearing with increased frequency on established, well attended programs such as the Charlotte Post Graduate Seminar (October 3rd), the North Carolina Academy of General Practice Convention (October 31), and the Watts Medical and Surgical Symposium (February 21). It was agreed that the committee should encourage and support in any way possible all such presentations.

The possibility of a speaker for the 1969 State Society meeting (preferably at one of the general sessions) was discussed but ruled out automatically because no time was available this year for a speaker sponsored by our committee.

Individual committee members have been active in writing, speaking, or otherwise participating in projects related to the work of the committee.

Dr. Hulka had the longest list of appearances. Most have been in North Carolina but also he has appeared in Florida, Puerto Rico and Washington, D. C.

Dr. Ross and Dr. Cherny have been only a little less active. Dr. Cherny speaks often for college, church and civic groups. Dr. Ross has appeared in Texas, Virginia and West Virginia. He has been active on the Governor's Commission along with Rachel Davis. Dr. Davis has worked as usual in her own county society.

Dr. Breslin wrote the chapter "How the Physician Can Assist the Attorney in Rehabilitating Broken Marriages" for the book "Therapeutic Family Law."

Dr. Easley was a speaker on North Carolina State's Raleigh program, University Days for Women. Mostly she is a speaker for very assorted women's groups.

The other committee members have not been heard from to date but is the chairman's belief that they also have been active.

Eleanor B. Easley, M.D., Chairman

COMMITTEE ON DEVELOPING FEDERAL HEALTH PROGRAMS

The impact of the many health laws passed by the 89th and 90th sessions of the Congress during 1966 and 1967 was reflected in the charge made to this Committee to keep abreast of the resulting developing federal programs. The broad emphasis of most of these programs was directed to the planning of health resources and health care delivery with a smaller emphasis on operational programs.

The most important of these laws was the Comprehensive Health Planning Act (P. L. 89-749), and

its amendments (P. L. 90-174), denoted as the Partnership for Health Amendments of 1967. There was a considerable amount of rightful apprehension felt by organized medicine since the law and its amendments call for a thorough survey of all health matters, but by statute, designated the chief responsibility to the non-providers of medical care and thereby gave the practicing physicians relatively little weight in the councils of those carrying out the planning programs. In addition, much confusion resulted from the many local and regional or area-wide groups that were established to carry out planning activities. For the most part, the past year was devoted to securing and correlating information concerning the various groups working on this problem, and attempting to secure meaningful participation of practicing physicians at the state and local levels in at least an advisory capacity, since they were prevented by law from assuming a larger directing and counseling activity. The report of the Subcommittee on Comprehensive Health Planning gives in more detail some of the activities related to this program.

To mention just a few of the area-wide groups involved will give some idea of difficulty in maintaining a clear perspective of what is going on:

Central Highlands Health Council formed under the guidance of the Western North Carolina Regional Planning Commission, and the Blue Ridge Health Council, in the western part of the state.

The State of Franklin, an area-wide council, trying to function with requested planning funds under P. L. 89-749, for the extreme western area of the state.

Another planning program started before the passage of the above mentioned laws is the Coastal Plains Regional Commission, chartered in 1967. This health planning commission was set up in connection with accelerating the economic growth potentials in the coastal plains of North Carolina, South Carolina and Georgia. Its health planning activities to date have been very limited.

The second large group of activities is vested in the programs of the North Carolina Regional Medical Program and its main objectives "are to mobilize all health care knowledge and resources through comprehensive planning cooperative enterprise for a concerted attack upon the problems of heart disease, cancer, stroke and related diseases.

Also, "the coordination and augmentation of an already large number of existing health activities, interests, and institutions and, in the process, the enhancement of ultimate effectiveness of each component element." This program reaches out from bases in the three university schools of medicine in the state. Of late, it has become active in delivery of care services in eastern North Carolina and the study of certain specific problems related to specific population groups in different geographical areas.

If this report sounds confusing, it is only a reflection of a confusing picture of many groups trying to implement the health planning laws. To complicate the matter further, the voluntary agencies through the

North Carolina Health Council are presently undertaking similar comprehensive health planning activities at the state and area-wide levels. This is of importance since representation from the State Medical Society to this planning body has been requested and has been granted.

The need for further communication and correlation activities cannot be over-emphasized. In addition, it is imperative that members of the Medical Society aggressively involve themselves at least in advisory capacities in order to maintain some type of professional direction and counsel.

Maurice Kamp, M.D., Chairman

B. SUBCOMMITTEE ON COMPREHENSIVE HEALTH PLANNING

This committee, a sub-committee operating under the general Committee on Developing Federal Health Programs of Commission II (Advisory and Study), was structured for the first time during the 115th administrative year of the Medical Society of the State of North Carolina (David G. Welton, M.D., President).

Public Laws 89-749 and 90-174 called upon and authorized the several states to designate a state agency within its framework for making comprehensive health plans in that geopolitical entity. The Office of Comprehensive Health Planning was set up within the North Carolina Department of Administration to manage the planning effort within this State. An Advisory Board of forty-nine people was created as an auxiliary to the Office of Comprehensive Health Planning. The membership of this Advisory Board is preponderantly non-providers of health care.

In addition to functions in the area of health planning, the administrative unit and its Advisory Council have duties involving recommendations to certain divisions of HEW regarding grants for projects other than those of planning grants. These projects involve operational grants in the health field.

Regional and sub-regional Health Planning Councils have developed in several areas of this State. Some of these were operational prior to the Partnership for Health Enactments. Others have been formed since. Some have applied for planning grants. It is presumed that the planning arising out of these regional councils will be meshed into the state plan.

The Society Sub-committee on Comprehensive Health Planning does not have status with the state health planning effort.

The committee selected the following areas of function for this year:

Surveillance

Information to the State Society and its membership regarding Comprehensive Health Planning

Promotion of personal involvement by physicians in private practice in the Regional Health Planning Councils

Catalysis of component societies for action involvement of providers of care in this planning movement

To these ends, several information communications have been sent to the component Society Presidents. A 70-page plus inserts booklet on Comprehensive Health Planning was prepared with the assistance of the Society Headquarters Office. This was sent to all component Society Presidents and to a few other involved M.D.s within the State. The supply was quickly exhausted, and we were unable to comply with some of the out-of-state requests for the booklet.

The Chairman has attended two national meetings on Community (Comprehensive) Health Planning and recently made a report on the latest of these to the Society.

One further mailing of informational nature to the component societies is planned for the remaining part of this administrative year.

Frank W. Jones, M.D., Chairman

D. SUBCOMMITTEE ON COASTAL PLAINS

The subcommittee on Coastal Plains met as part of the Committee on Developing Federal Health Programs on September 25, 1968.

The Coastal Plains Commission, a Federal, State, and local government partnership for economic planning and development, is engaged in major studies to identify the appropriate programs to raise the standards of living for citizens in 159 counties in North Carolina, South Carolina, and Georgia.

The Commission hopes to accelerate the economic growth of the area through programs that bring to bear the resources of local leadership, local government, State government and the Federal government.

To achieve this goal, it has designated six principal target areas for concentrated study. These include transportation, industrial development, marine resources, education and manpower training, tourist industries, and agriculture.

The impact that this program would have on Eastern North Carolina was discussed, and we intend keeping a close eye on further developments. If an all out effort is made to develop the full potential of coastal resources, we in the Medical Society, will want to be prepared to meet the extra demands for medical care.

William H. Romm, M.D., Chairman

COMMITTEE ON FINANCE

The Finance Committee is glad to report to the membership that the Society is financially solvent. There was a small deficit in income over expenditures for the year 1968, but expected income for 1969 will be sufficient to pay this off.

The Committee members have been asked "What are the plans for the Society's property on the Raleigh-Durham Highway?" We have unanimously voted to recommend nothing at the present time for the following reasons:

1. We do not need extra money today. So that if we sold it today where could we re-invest the money that would be any better than where it is presently invested?

2. We do anticipate that we may need this money to complete the Headquarters building or buy adjacent land to the new building for future parking space, or other emergencies.

3. When this property is liquidated we want it done in a calculated manner to best serve the interests of the Society.

Wayne J. Benton, M.D., Chairman

HEADQUARTERS FACILITIES AND PLANNING COMMITTEE

On April 5, 1968 the Society entered into its consulting development contract with Mr. Ford Worthy, M.A.I., of Raleigh, North Carolina. Following that date we had quite a bit of discussion among the membership as to how we were going to finance the facility. The method of financing was finally resolved on November 10, 1968 at a meeting of the House of Delegates in Raleigh.

On December 3, 1968 we entered into a contract with our architect, G. Milton Small and Associates. Since that time Mr. Worthy and Mr. Small have been working toward development of a schematic plan. They visited other headquarters facilities in Austin, Texas, East Lansing, Michigan, and Philadelphia County Medical Society in Philadelphia. The schematic plan is now in the hands of members of headquarters facilities committee.

The firm of Rothrock, Reynolds and Reynolds of Miami, Florida, was employed by the Society to make a study of the Society's management functions. The group has reviewed the schematic plans and has approved them. The firm has made several recommendations relative to the IBM operations room and the Offset Printing and machine operations room.

The Society has also obtained an additional lot joining our building site to Bloodworth Street.

We should move into the building by September 1, 1970.

A. Hewitt Rose, M.D., Chairman

COMMITTEE ON HOSPITAL AND PROFESSIONAL RELATIONS AND LIAISON TO THE NORTH CAROLINA HOSPITAL ASSOCIATION

This committee met on September 26, 1968 at the annual conclave of committees. It considered various matters within the scope of its interest. The discussion can be categorized as follows: (recommendations to the House of Delegates will be underlined).

I. Group practice. The federal governments proposed financial support of closed panel type of group practice in a pre-paid health plan was discussed. It is recommended that the MSSNC express opposition to federal intervention in the private practice of medicine by supporting closed panel type of group practice involving pre-paid schemes.

II. Regional Medical Programs were discussed in detail and it is recommended that the MSSNC continue its support and approval of the RMP and that it ac-

tively seek more physician representation on the State Comprehensive Health Planning Council. It also recommends that county societies make certain that physician representatives be included in local area Health Planning Councils.

III. The Emergency Medical Care Survey conducted jointly with the Committee on Disaster Medical Care was reported on. Approximately 75 responses had been received from hospitals.

IV. A request of the N. C. Highway Patrol that the MSSNC help to relieve it of the burden of requests for the emergency transportation of donor blood was reviewed. A detailed report on the problem prepared by Mr. Dan Mainer was read. It was recommended that: Before a request for emergency transportation of blood is made to the highway patrol, that the attending physician should sign a "Certificate of Emergency" to be delivered to the Highway Patrol at the point of delivery.

Additionally, the chairman held a conference with the officials of the Piedmont Regional Red Cross Blood Bank and reported by letter to President Welton. This letter included a recommendation: that the MSSNC sponsor a meeting of representatives of the N. C. Highway Patrol, the Red Cross Blood Bank, hospital officials and representative physicians to discuss the problem and work out a solution.

V. The proposal that physician membership on hospital Boards of Trustees be encouraged was studied. No serious problems in relationship between the two groups was found by a committeeman who had been asked to study the question. It was suggested that we explore with the Duke Endowment the reasons for its attitude of opposition to physician representation on hospital Boards of Trustees. The chairman has discussed this with officials of the Duke Endowment. However, since Mr. Marshall Pickens, the Director of the Duke Endowment is retiring this Spring, your chairman is of the opinion that the question should be raised after a new Director is selected. Meanwhile, it is recommended that: In keeping with the previously established policy of the AMA, the MSSNC should recommend to the Boards of Trustees of the hospitals of the state that the Chief of the Medical Staff of the hospital should be a voting member of the Board.

VI. The chairman received and prepared to act upon a request of a member of the MSSNC for investigation of a denial of hospital privileges. However, the request was withdrawn and no action was taken.

J. M. Van Hoy, M.D., Chairman

COMMITTEE TO WORK WITH N. C. INDUSTRIAL COMMISSION

The last meeting of the committee was held on September 26, 1968, in Southern Pines. At that time the problem with the N. C. Industrial Commission regarding payment of usual and customary fees for physicians and hospitals was discussed at length. This multi-faceted problem with its many political implications was carefully studied. The committee has been attempting to improve the viewpoint of the Industrial

Commission as regards usual and customary fees. At present the Governor is being consulted in efforts to achieve more equitable understanding of the charges of physicians and hospitals. The possibility of Legislative action has also been brought before the Legislative Committee of the Society.

There have been fewer and fewer fee disputes brought to the attention of the members of the committee during the past year. A meeting is planned with the full Industrial Commission this spring.

J. S. Mitchener, Jr., M.D., Chairman

INSURANCE INDUSTRY COMMITTEE

1. COMPOSITION AND MEETINGS

Fifteen physicians (in general practice and most specialties) meet quarterly in various locations throughout the state. The 3-4 hour sessions are generally held on a Wednesday at 2 p.m.

The Committee meets in joint session with the Medical Relations Sub-Committee of the N. C. Health Insurance Council (approximately 15 commercial health insurance officials.)

2. FUNCTION AND ACTIVITIES

a. Review of pertinent new legislation or new developments in the health field which may effect payment of benefits to physicians.

b. Close liaison and interchange of information with commercial health insurance carriers.

c. Review, development, and advise on various health insurance claim forms.

d. Liaison with Pilot Life Insurance Company. This Committee is the official liaison committee in dealing with the carrier of Part B Medicare.

e. Claim Review Service (CRS). This is the most dynamic and important function of the Committee. This provides a "peer" review of questionable or unusual health insurance claims. Review cases may be submitted by a patient, by an attending physician, or by the insurance carrier, with the latter generally referring most of the cases. In most cases, the group of physicians and insurance men are asked to review available information and determine the contractual liability of the insurance carrier under the policy language.

The usual and customary fee is a major factor in rendering the decision.

The CRS handles 3-5 new cases each meeting plus completion or followup on previous cases.

3. COMMENTS

1. Need to review more fee dispute cases which are submitted by the doctor: the review is a two-way street and many doctors are unhappy with the insurance payments but somehow never contact this Committee.

2. Need better liaison with Medicare Part B carrier.

3. Many long-term, convalescent and extended care cases are tying up active hospital beds, a form of overutilization. The critical shortage of extended care facilities throughout the state is largely responsible for this. An aggressive expansion of such facilities would greatly

reduce the costs of medical care particularly through the older age.

4. The Committee would be pleased to have questionable cases and complaints referred from the State Insurance Commissioner in order to encourage better review of questionable cases.

A. J. Dickerson, M.D., Chairman

COMMITTEE ON PROFESSIONAL INSURANCE

The Committee on Professional Insurance meets on an average of four times a year and discusses with Representatives of the St. Paul Insurance Company pending or threatened cases of malpractice liability. In addition other matters of insurance pertaining to this committee are reviewed.

John C. Burwell, Jr., M.D., Chairman

COMMITTEE ON LEGISLATION

Submitted herewith is a preliminary report from the Committee on Legislation for the Medical Society of the State of North Carolina: This is being prepared in the middle of January and undoubtedly by the time of the spring meeting there will be modifications or changes. However, at the moment the report consists of the fact that the Committee has met together with consultants and other interested people and is in the process of making plans for the coming General Assembly. The items of particular interest so far as the Medical Society is concerned will evolve around the Anatomical Gift Act, an Act being prepared by the Association of Professions relative to corporate practice of medicine; an Act being prepared by the N. C. State Highway Patrol relative to improve safety on the highways, support of legislation from the Nurses' Association relative to diploma schools of nursing; support to the medical schools relative to improve financing of medical schools; and finally, interest and consultation with the Department of Public Welfare relative to the implementation of Title XIX. This must be considered, then, as a preliminary report and a more detailed report will have to be delivered to the House of Delegates at the time of the meeting.

Hubert M. Poteat, Jr., M.D., Chairman

COMMITTEE ON MATERNAL HEALTH

The Committee on Maternal Health has collected a total of 73 maternal deaths during 1968 which were reported through the Bureau of Vital Statistics of the State Board of Health. Of these 73, 32 were white, 40 were colored and one was Indian. Table I lists causes of death. There were 10 reported due to hemorrhage, 10 due to toxemia, 8 due to infection, 11 due to embolism, 5 due to cardiac failure and 8 due to other obstetrical causes. There were 19 classified as non-obstetrical. Other obstetrical causes included:

Aspiration pneumonitis, undelivered;

Cerebral vascular accident due to rupture congenital aneurysm, 3 days following delivery;

Hemorrhage, probably ruptured ectopic pregnancy;
 Interstitial pneumonitis, severe;
 Massive acute pulmonary edema due to congestive
 heart failure, post delivery;
 Pneumonia due to empyema at 29 weeks gestation;
 Respiratory failure due to aspiration of vomitus at
 31 weeks pregnancy;
 Respiratory arrest due to shock resulting from
 peritonitis and gangrene of the intestines.

Ten of the 19 non-obstetric maternal deaths occurred
 due to highway accidents, either collision or pedes-
 trian injuries. These 73 deaths are currently being
 further documented and analyzed. The distribution of
 maternal deaths by county is shown in Table II.

All of the maternal deaths from 1946 through 1965
 have been carefully re-evaluated and analyzed through
 the efforts of the Chairman and have been reported
 in the North Carolina Medical Journal, Volume 29, No.
 9, 1968. Other articles in press which will appear in
 the Medical Journal in future issues in 1969 include
 deaths from anesthesia, hemorrhage and toxemia. The
 Committee has also been instrumental in organizing
 a Perinatal Mortality Report which will begin appear-

Table 1

	1968			
	Total	White	Colored	Indian
Hemorrhage	10	6	4	
Infection	8	1	6	1
Toxemia	10	4	6	
Embolism	11	6	5	
Cardiac	5	3	2	
Anesthesia	1	1		
Other O-Ob	8	3	5	
N-Ob	19	9	10	
Insufficient Information	1		1	
TOTAL	73	33	39	1

Table II

Maternal Deaths by County			
	1968		
Alamance	1	Mecklenburg	5
Bladen	1	Moore	2
Buncombe	2	New Hanover	2
Burke	1	Onslow	2
Cabarrus	1	Pitt	2
Catawba	1	Robeson	3
Chowan	1	Rockingham	1
Cleveland	3	Rutherford	1
Craven	1	Sampson	2
Cumberland	3	Swain	1
Duplin	2	Union	1
Durham	7	Wake	6
Edgecombe	1	Wayne	1
Forsyth	5	Wilkes	2
Guilford	8	Wilson	2
Halifax	1		
Lee	1	TOTAL	73

COMMITTEE ON MATERNAL HEALTH

Statement of Receipts and Expenditures

January 1, 1968—December 31, 1968

Balance: January 1, 1968	\$1,273.13
Receipts: N. C. Medical Society	4,000.00
	<hr/>
	5,273.13

Disbursements:

Salaries—

Secretary	\$2,100.00	
Social Security Tax	92.40	
Fringe Benefits	234.22	\$2,426.62

Supplies/Expenses—

Office Supplies	8.35	
Subscriptions	18.00	
Postage	30.00	
Departmental	5.15	61.50

Equipment—

Portion of Cost of Data File	38.53	
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Travel—

Dr. W. Joseph May:

Fort Lauderdale, Fla. 228.40

Jan. 10-13

Southern Pines, N. C. 78.48

Sept. 26-29

306.88 2,833.53

Balance December 31, 1968	\$2,439.60
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ing monthly in the North Carolina Medical Journal
 in January of 1969.

The full Committee on Maternal Health at its September 1968 Meeting at Mid Pines discussed and initiated a program for publishing a brochure on therapeutic abortion to include an introduction, a copy of the Therapeutic Abortion Law from the North Carolina Statutes. Recommendations and guidelines for establishing therapeutic abortion study committees in community hospitals and an explanation of a therapeutic abortion report which has been approved by the Executive Council for completion in 1969 will be a part of the brochure.

All of this work continues in progress and will be delivered to the State Medical Society during 1969. In behalf of the full Committee on Maternal Health, I extend appreciation for the continued confidence and co-operation of the Executive Council and the Staff of the State Medical Society, and assure our cooperation and assistance in continuing the work of the Maternal Health Committee.

Attached is a financial statement for the year ending December 31, 1968, which shows a balance of \$2,439.60. This includes the recent receipt of \$2,000.00 for the last half of 1968 and will carry us through the first half of 1969.

W. Joseph May, M.D., Chairman

COMMITTEE ON MATERNAL HEALTH

A Meeting of the Committee on Maternal Health was held Friday, January 24, 1969 at Pinehurst in the Dutch Room of The Carolina. The Meeting was convened at 2:45 P.M. with W. Joseph May, M.D., Chairman, presiding.

The Chairman first reported to the Meeting to bring everyone up to date on the activity and progress of the ad hoc Committee on Therapeutic Abortion Study which was constituted at the September Meeting of the Committee on Maternal Health. The subcommittee convened first at the Duke Medical School in the Conference Room of the Department of Obstetrics and Gynecology on October 25, 1968 at 3:15 P.M. Mr. James T. Barnes and Mr. Bryant Paris of the State Medical Society Headquarters, and Mr. Dave Corkey, a statistician from the State Board of Health were in attendance.

Robert K. Yowell, Fellow in the Department of Obstetrics and Gynecology at Duke University was also added to the study group. The Committee in this first meeting discussed the possible contents of a brochure on therapeutic abortion and a method of implementing a therapeutic abortion study survey. It was decided that the Therapeutic Abortion Law should be in print and included in this brochure for distribution to all members of the Medical Society. Guidelines for formation of therapeutic abortion committees and explanation of the report project were also to be included.

Dr. Roy T. Parker was given the responsibility for writing a preface to the brochure. Dr. J. Edwin Clement and Dr. William E. Easterling, Jr., were given the responsibility for writing guidelines for formation of therapeutic abortion committees in community hospitals. The mechanism for reporting therapeutic abortions was to be proposed by Dr. May, and Dr. Ted Scurletis and his consultant were to work up an adequate questionnaire.

This same group of people met again at Duke University in the same location as previously on November 15. At this time, various authors submitted their work which underwent the criticism of the entire group. Suggested changes in semantics were made and in some instances, changes in concept. Dr. Scurletis and his consultant proposed a very concise objective type of questionnaire which was also reviewed and criticized. Following this meeting, the Chairman was designated to edit this material, bring it together for content of a brochure; and Mr. Bryant Paris of the State Medical Society office was to make up a pamphlet sample for the next meeting. In the meantime, the Chairman sent out 25 of the questionnaires for sampling by obstetricians throughout the state. Their suggestions were also consolidated and brought to today's Meeting for consideration in changing the proposed questionnaire form.

This January 24, 1969, Meeting, which is presently being reported, was for a final summation and agree-

ment on the content material for a brochure which will be published soon. Since most of the fine detail work had been done, there was not too much difficulty in bringing together the final material. The brochure will contain an introduction, the printed therapeutic abortion law, guidelines for establishing and implementing therapeutic abortion committees in hospitals, a statement on the purposes and aims of the Therapeutic Abortion Survey Study, and sample consent forms and consultation forms will be included along with a sample of the Therapeutic Abortion Survey Study form. All members of the Maternal Health Committee will receive one of these brochures at a very early date and it is hoped that the Therapeutic Abortion Survey may get under way in the next few weeks.

The Chairman of the Committee on Maternal Health, Dr. May, remained at the Executive Council Meeting and reported the progress of the project back to Council, at which time they received the report graciously and seemed to give their enthusiastic endorsement to proceed with distributing a copy of the published brochure on therapeutic abortion to each physician in the Medical Society in the state. It is anticipated that there will be need for extra copies for interested people outside of the Medical Society. The Executive Council of the Medical Society also wholeheartedly endorsed the Therapeutic Abortion Survey Study.

Since the program had already been approved in principle, there was no action necessary at this Meeting of the Executive Council and they simply reaffirmed their interest in promoting this program.

The Meeting adjourned at approximately 4:45 P.M.

W. Joseph May, M.D., Chairman

MEDICAL-LEGAL COMMITTEE

1. Review of work done to date.

Three meetings of the Medical-Legal Committee were held during the year.

The first meeting was a joint session of the Medical Legal Committees of the N. C. Bar Association and the Medical Society at Raleigh, North Carolina, on May 31, 1968. Two principle topics were discussed, i.e. the possibility of establishing some type of plan for review of malpractice cases and the revision of the Medico-Legal Code. It was felt that further exploration into some type of plan, perhaps utilizing three or four regional panels within the State, would prove best for our State. Mr. Walter Horton, an attorney of Raleigh, was designated to assemble information that might be helpful to both the Medical Society and Bar Association.

In regard to the Medico-Legal Code, Mr. Warren T. Stack, Chairman of the Medical-Legal Committee of the N. C. Bar Association, advised that he would have to return to his parent body to determine circumstances of approval of the newly revised code.

The second meeting was on August 9, 1968, in Raleigh. Mr. Arthur Jones, N. C. Representative in the

General Assembly, from Mecklenburg County presented his plan for future legislation in regard to organ transplantation. It was stated the Institute of Government, Chapel Hill, had undertaken a study of the proposed bill.

Malpractice panels were again considered by the Committee. It was the feeling of our Committee that this subject be approached with great care and deliberation. Dr. John C. Burwell, Chairman of the Committee on Professional Insurance, and Mr. J. W. Thompson, Claims Manager, St. Paul Insurance Company, Charlotte, commented in regard to various plans for panels to arbitrate malpractice cases.

The third meeting was on September 25, 1968, at Mid Pines. Again the matter of malpractice screening panels was discussed. Correspondence from the AMA indicated that no policy position on this matter had been taken by them, the feeling being that the problem could best be worked out by each state. The Medical Society of the State of Virginia reported that in general they were pleased with the plan as it functioned in Virginia.

In regard to malpractice screening panels, the Medical-Legal Committee by unanimous vote recommended that further contract be made with the Committee on Professional Insurance and members of the committee arranged to go to Virginia to monitor a panel hearing.

In regard to the revised Inter-professional Code which was discussed at this meeting, it was the consensus of opinion that action by the N. C. Bar Association should be awaited.

At each meeting minor problems in regard to the Medical-Legal matters were discussed.

A one day Seminar was held by the N. C. Medical Society and N. C. Bar Association on June 1, 1968. This was well attended by physicians and attorneys with a preponderance of attorneys. Several letters commenting favorably upon the seminar were received.

No instance of alleged unethical action on the part of physicians has been reported to the committee.

Joint meetings were held in approximately thirty county societies during the year.

The Committee was represented by Dr. Howell at a meeting of the Special Committee of the Uniform Anatomical Gift Act. A one day program covering all aspects of law in regard to organ transplants was held at the National Academy of Sciences. A model Uniform Anatomical Gift Act, recently approved by the American Bar Association, was presented. This act was almost identical with the proposed legislation in the N. C. General Assembly as outlined by Representative Arthur Jones to our Committee.

2. Recommendations for the future.

Continued cooperation and liaison between the Medico-Legal Committees of the Medical Society and the N. C. Bar Association. A great deal of interest has been evidenced in regard to the Medico-Legal aspects of tissue transplantation. Enactment of some type of law, i.e., a uniform anatomical gift act is likely, and in this case assimilation of information pertaining to the law would be a project for our Committee.

Julius A. Howell, M.D., Chairman

COMMITTEE ON MEDICINE AND RELIGION

The Medicine and Religion committee held two meetings in 1968-69, September 27, 1968 in Southern Pines, N. C. and January 24, 1969 in Pinehurst, N. C. Dr. John R. Bender of Winston-Salem was elected Vice-Chairman (our first vice chairman).

Dr. C. T. Wilkinson, one of the original members of the Medicine and Religion Committee died in October 1968. Dr. Wilkinson was one of the most devoted and faithful members of the Medicine and Religion Committee. Dr. Benjamin Britt was appointed to replace Dr. Wilkinson.

Continued efforts to create a climate for communication between the professions of Medicine and Religion were the committee's goal in 1968-69. There were five (5) joint meetings of County Medical Societies and Ministerial Associations. Three (3) County Society programs were held. One (1) program was held with a seminary.

Dr. Wilkerson presented a program at the Tri-State Medical Society annual meeting at Nags Head in June 1968.

Efforts have been made to implement the AMA Medicine and Religion Program to Seminaries. Dr. Wm. Hedrick, representing the Wake County Society is working with Southeastern Theological Seminary at Wake Forest.

The Medicine and Religion Committee again conducted a one-half day Workshop for County Medical Society Medicine and Religion Committee Chairman at Pinehurst January 24, 1969. Dr. Paul B. McCleave, Director of the AMA Department of Medicine and Religion was the featured speaker. The workshop was sparsely attended, but the physicians present were enthusiastic. They felt that they had gained valuable information and new insight in the Medicine and Religion program.

There are now plans made to have the AMA exhibit on Medicine and Religion shown at the Annual Meeting of the Medical Society in Pinehurst, May 1969.

The Committee devoted much of its meeting time to the planning of a two day Medicine and Religion Symposium, "Dialogue and Dilemma." This symposium is to be sponsored jointly with the AMA Department of Medicine and Religion and The UNC School of Medicine. Dates of the symposium have been set for Monday and Tuesday September 8 & 9, 1969 at Chapel Hill. An outstanding program has been planned.

Chaplain Fred W. Reid, Mr. Dan Mainer and Dr. Wilkerson attended the Southeastern Regional Medicine Workshop March 15, 1969 in Atlanta, Ga. This meeting was informative and should help the committee to stimulate further Medicine and Religion activity on the State and County level.

Jack W. Wilkerson, M.D., Chairman

COMMITTEE ON MENTAL HEALTH

The Committee on Mental Health has held two meetings this year at which time efforts have been directed toward coordinating the activities of the three Subcommittees, each of which have had 2 meetings, i.e.,

Mental Retardation in Childrens' Services, Alcoholism, and Mental Health Education. The activities of these Subcommittees are well covered in the reports by the respective Chairmen, Dr. Lloyd Thompson, Dr. Donald MacDonald, and Dr. Charles Vernon.

The very capable and energetic Chairman last year of the Alcoholism Subcommittee, Dr. Hamilton Stevens, was made Chairman of the Medical Society's Committee on Drug Abuse. Coordination of activities are maintained through the closely related concerns of the Committee on Drug Abuse and the Subcommittee on Alcoholism by Dr. Hamilton Stevens, who is still serving as a member of the Alcoholism Committee. We are most fortunate that Dr. Donald Mac Donald, a Psychiatrist who has a great deal of experience and knowledge about alcoholism agreed to serve as Chairman of the Alcoholism Subcommittee.

In addition to the major items referred to in the reports of the Subcommittees, several points of emphasis are worthy of mention:

(1) An ad hoc Committee on Mental Health and the Law was appointed from the Committee on Mental Health with Dr. Charles E. Smith, Dr. Ronald Levine, Dr. Walter Sikes, Dr. Donald Davis, and Dr. Ben Britt, Chairman, which prepared a statement on Mental Health and the Law Offender. The statement was approved by the Committee on Mental Health and the Executive Council of the Medical Society. This statement serves to identify existing deficiencies in the present facilities and services as it relates to the mental health of prisoners and recommends that appropriate diagnostic and therapeutic mental health programs for treatment of law offenders be provided. Formation of appropriate medical and continuing education programs, as well as programs into the causes, prevention, and treatment of criminal behavior disorders, are recommended.

(2) The first of perhaps a number of state mental hospital regional conferences on Continuing Education was held at Cherry Hospital. An outstanding faculty of mental health leaders from across the nation participated in the program which was very well attended. This program was under the auspices of Cherry Hospital with Dr. Hazel Zealy serving as Chairman of this ad hoc Committee. Serving with Dr. Zealy were Dr. Micky Vitols, Dr. Jim Osberg, and Dr. Leon Robertson and Mr. Jack Adams, Consultant.

(3) In recognition of the national trend for the establishment of Suicide Prevention Centers and the success of the first of such ventures in North Carolina, Crisis Intervention Center in Greensboro, the Committee on Mental Health felt it advisable to prepare a statement of principles concerning physician's responsibilities in crisis intervention. Accordingly, an ad hoc Study Committee was appointed, Chairmanned by Dr. Robert Garrard, to prepare a suggested statement and reported back to the committee for evaluation. A preliminary draft of this proposed statement has been prepared by the Subcommittee and for consideration by the Committee at a later date.

(4) A history on the physicians in the Mental Health Movement in North Carolina was prepared by Dr.

Lloyd J. Thompson. This report will be included as a section in the History of the Medical Society of the State of North Carolina being prepared by Dr. Roscoe McMillan.

(5) The Medical Society served as a co-sponsor with the North Carolina Department of Mental Health in the John W. Umstead lecture on February 6 and 7, 1969, at Raleigh Memorial Auditorium on the topic of "Biological Roots of Chronicity." This conference was well attended by mental health leaders and physicians from across the state.

(6) Since the last report Dr. Leon Robertson, Chairman of the Committee on Mental Health of the North Carolina Academy of General Practice, has been elected President-Elect of the North Carolina Mental Health Association. Dr. Paul G. Donner has been elected President of the North Carolina Neuropsychiatric Association. Previous Committee member, Dr. Nicholas Stratas has been appointed Chairman of the American Psychiatric Association's Committee on Mental Health Education.

(7) As a cooperative effort with Cherry Hospital, a medical student surveyed selected physicians in eastern North Carolina to determine their wishes and desires in regards to continuing education in mental health as well as new and desired services in mental health to be made available at the community and regional levels. Dr. James Osberg supervised the survey and is to make the report of the findings in the near future.

The Fifteenth Annual AMA Conference of State Medical Society Mental Health Representatives is to be held at the Drake Hotel in Chicago on March 14 and 15, 1969. A good turnout of physicians from North Carolina interested in the mental health of children is expected to be present.

The Committee on Mental Health is deeply indebted to the interest, support, and encouragement provided by Mr. James Barnes and Miss Kay Zeigler. Dr. D. A. McLaurin, Commissioner, has attended faithfully the meetings of the Committee and Subcommittee. His guidance and support, as well as the leadership provided by the Subcommittee Chairmen, are deeply appreciated.

John McCain, M.D.

SUBCOMMITTEE ON MENTAL HEALTH EDUCATION

1) Workshop on Planning: A weekend workshop has been scheduled for February 28-March 2 at Quail Roost outside of Durham. Approximately 30 North Carolina physicians interested in mental health education for practicing physicians (primarily non-psychiatrist) will confer on this subject with a goal of establishing a statewide system to coordinate existing educational efforts and establish new ones. Representatives from medical schools, various medical specialists, and hospital departments of education are invited and challenged to come up with a practicable plan of action. A report on this workshop will be forthcoming. The participants will constitute a state steering committee in psychiatric education for physicians.

2) Special psychiatric issue of the North Carolina Med-

ical Journal: Lack of completion of two critical articles has thwarted finishing a series of very excellent articles on the practice of psychiatry as viewed by North Carolina physicians (psychiatrist and non-psychiatrist). Hopefully the bottleneck can soon be broken.

3) Mental Health Training Institute: This organization has now been established with a Board of Directors and, more importantly, a budget. The Institute idea began with interest between the State Department of Mental Health (Dr. James Osberg) and East Carolina University's new School of Allied Health (Dean Edwin Monroe, M.D.) in developing better in-service education in psychiatry for diverse care-giver groups in the East including physicians, of course. Hopefully the Institute will be a mechanism through which psychiatric knowledge and skill can be taught close to the delivery point of service. Dr. Walter Savage of Greenville is Chairman of the Board, Clinton Pruitt, Ph.D. of E.C.U. is Vice Chairman, and James Osberg, M.D. is Secretary.

4) Cathell Project: Dr. James Cathell's physician consultation project, which has been endorsed and promoted by the State Medical Society continues to foster interest throughout the State in close one-to-one psychiatrist-physician consultation. The consultative visit, by psychiatrist to the hospital or the physician's office has developed as one of the best teaching devices for this subject. This is no surprise, but the need for this type training will have to be given some priority when considering manpower deployment.

5) Fourth District One-day Symposium at Goldsboro: The day long symposium on psychiatry in October, 1968 was held at Goldsboro. Cherry Hospital, State Department of Mental Health, Fourth District Medical Society, and others cooperated to bring an excellent program to participant physicians. Hopefully the state mental hospitals and centers for the mentally retarded can become regional foci for physicians' continuing education.

6) The 10 bi-weekly afternoon seminars at U.N.C. continue to be held this year. Five physicians are attending this year. Seven attended last year.

7) The U.N.C. Bi-Annual Symposium in Psychiatry was held this past October, 1968. The subjects presented were drug abuse and adolescence. Excellent papers were presented and discussion was lively.

8) The Mental Health Speaker's Bureau which was established and operated through this subcommittee continues at a much reduced pace. Most medical groups now get psychiatrist speakers without the help of the state office, although such help remains available.

The subcommittee's interest is turning more toward attempting to promote physician education which is more intensive and extensive than that available in the past. We would like to see physicians getting more and better psychiatric consultation in particular; but also intensive weekend training sessions utilizing group process as a teaching instrument would appear valuable; and the promotion of more accessible seminar series is desirable.

The Quail Roost Workshop is expected to be a hallmark in the history of continuing education in psychiatry for the practicing physician. The results of the

deliberations there should offer directions for the future.
C. Vernon, M.D., Chairman

SUBCOMMITTEE ON MENTAL RETARDATION AND CHILDREN'S SERVICES

The Subcommittee on Mental Retardation and Children's Services held three meetings during the past year. The main interest centered around the work of the Governor's Study Commission on the Public School System of North Carolina. Two members of this subcommittee served on committees of the Governor's Study Commission.

From the standpoint of mental health it was gratifying that the Governor's Study Commission endorsed the establishment of kindergartens in our public schools—placing this step high in priority for action by the General Assembly.

For over a year this subcommittee has been discussing the need to have both physical and psychological examinations of all children before they enter the first grade. A recommendation for such preschool screening was made by the Governor's Study Commission. It was found that one of our members, Dr. Doris Hammett, had been for eight years carrying out a program of this type in Haywood County. Dr. Hammett has written a report about her program and it will be published in the North Carolina Medical Journal. An editorial on the same topic will appear in the same issue of the Journal.

Also under discussion for the past year has been the educational needs of exceptional children—particularly those with a specific language disability or dyslexia. While the Governor's Study Commission took cognizance of this particular group along with the needs of the mentally retarded and other handicapped children, much remains to be done.

In the field of dyslexia physicians play an important part in diagnosis and recommendation. To increase knowledge and interest on the part of physicians in this problem a member of this subcommittee, Dr. Mary Margaret McLeod, arranged a symposium on the subject at the 1968 annual meeting of the Medical Society. This symposium was a joint program for the Section on Pediatrics and the Section on Neurology and Psychiatry. The three papers that were presented have been published in the November, 1968, issue of the North Carolina Medical Journal.

At the subcommittee meeting on January 9, 1969 the recommendations of the Governor's Study Commission were reviewed. It was agreed that the Medical Society might wish to express its interest in the recommendations and a willingness to lend help whenever possible. However, instead of specifying priorities for certain actions a motion was passed that the Medical Society should let the State Superintendent of Public Instruction know that the Medical Society stands ready to help in the best possible education for all children. This motion was passed on for consideration by the Council.

Concerning mental retardation the subcommittee discussed the proposals of the North Carolina Council on Mental Retardation for adequate evaluation of children before assignment to special education classes. It was

recommended that the Council endorse the concepts contained in these proposals. The next meeting of the subcommittee will be devoted entirely to hearing reports from two members of the North Carolina Bar Association's Committee on Mental Retardation concerning what this subcommittee should know and what action is to be taken. Lloyd J. Thompson, M.D., Chm.

SUBCOMMITTEE ON ALCOHOLISM

In keeping with its policy of providing continuing physician education in the area of alcoholism, a statement concerning the diagnosis of alcoholism is being prepared by the subcommittee. The diagnosis of this condition may not always be apparent to the physician and he may have to rely on the history as given by the patient's spouse initially. The physical concomitants of chronic alcoholism may not make their appearance until relatively late in the development of the disease. Various forms of alcoholism have been described and these will be outlined in the prepared statement.

A recent report from the Department of Transportation states that the use of alcohol by drivers and pedestrians leads to some 25,000 deaths and a total of at least 800,000 crashes in the United States in each year. Alcoholics and problem drinkers account for about half of all fatal accidents. The Subcommittee on Alcoholism is awaiting with interest the results of a study currently being carried out on the association of drinking and driving in North Carolina.

The problem of the alcoholic detained in city or county jail has been considered by the committee; this is a complex problem with many social and medical ramifications. One possible way of alleviating the situation is through the provision of detoxification centers as has been done in some localities such as St. Louis, Missouri and Washington, D. C. Such centers provide sobering up care on a residential basis at no cost to the patient and alcoholics are then referred to more long term rehabilitation programs.

In a recent decision the U. S. Supreme Court ruled that it is not unconstitutional to jail chronic alcoholics for public drunkenness. Some disappointment at this decision has been expressed by physicians and others who have contended that a criminal penalty should not be inflicted on an individual for being in a condition which he does have the power to control.

It is also felt that this decision may delay the development of treatment and rehabilitation centers for alcoholics throughout the country.

The chairman of the subcommittee attended the 28th International Congress on Alcohol and Alcoholism in Washington, D. C., from September 15th through September 20th. The many general and sectional meetings on the varied aspects of alcohol problems provided a stimulating overview of the complexity of the management of this worldwide disease.

The subcommittee has in the past gone on record as supporting the local alcohol information centers, but as time goes by and circumstances alter a reassessment of our position may be in order. Many communities are building comprehensive mental health centers which are required to furnish alcoholism

services; the subcommittee therefore recommends that local alcoholism programs be coordinated with comprehensive mental health centers as they are developed.

The subcommittee took note of a proposal to establish a North Carolina Foundation on Alcohol Problems, and expressed some concern over the duplication of services which might result.

It was reported to the subcommittee that within the prison population there are around 5,000 alcoholics each year, many of whom are there primarily because they lack the financial resources to secure treatment elsewhere.

The subcommittee also turned its attention to the updating of its own goals and functions. The A.M.A. definition of alcoholism was taken as a starting point:

"Alcoholism is an illness characterized by preoccupation with alcohol and loss of control over its consumption such as to lead usually to intoxication if drinking is begun; by chronicity; by progression; and tendency towards relapse. It is typically associated with physical disability and impaired emotional, occupational, and/or social adjustments as a direct consequence of persistent and excessive use."

It should be evident from this definition that a purely medical approach to the problem of alcoholism is unlikely to be effective. While the management of acute alcoholism may at times constitute a medical emergency and while the more chronic physical impairments associated with alcoholism such as malnutrition, chronic gastritis, and hepatic cirrhosis may require attention, such medical treatment does nothing to alleviate the drinking problem itself. In fact, the disease process of alcoholism may actually be furthered and perpetuated by periodic medical treatment of the physical complications unless definite steps are taken to deal with the basic problem of alcoholism. This point has been well stated in "Alcohol Problems: A Report to the Nation," in which (page 89) it is said that "the provision of medical care when needed for alcohol intoxication is not treatment of the basic drinking problem. Detoxification treatment or treating the chronic physiological effects should not be confused with dealing with the drinking problem itself. Every episode of hospitalization should be used as an occasion to move the patient to out-treatment for his drinking problem. This can be done only if hospital personnel has trained for this task and facilities such as inpatient rehabilitation programs and outpatient clinic services are available."

While the Subcommittee on Alcoholism has in the past voiced concern over such matters as the admission of alcoholic patients to general hospitals and the encouragement of physicians to treat alcoholism on the same basis as any other form of illness, it must again be emphasized that the comprehensive treatment of the alcoholic involves the collaboration of various disciplines as well as the medical profession in offering services to persons other than the alcoholic patient himself. The alcoholic himself cannot be treated as an isolated individual with any hope of success. The treatment program must involve those other persons who are intimately concerned with his problems, such as

his employer, his spouse, his pastor, and members of the legal profession. The physician's duty to his alcoholic patient is not discharged until he has made every effort to secure long term follow-up care for his patient and his patient's spouse after the immediate medical needs have been met.

Unfortunately, suitable alcoholism rehabilitation programs are almost entirely lacking in North Carolina despite the pioneering efforts of the North Carolina Department of Mental Health in establishing facilities for the inpatient care of alcoholics at the Alcoholic Rehabilitation Center at Butner, and more recently at other locations. Inpatient treatment units which are geographically separated from the alcoholic's home community are unable by virtue of their isolation to provide the continuity of care and the involvement of other concerned persons in the treatment program which is necessary for a successful outcome.

The Subcommittee on Alcoholism therefore urges physicians to insure that the medical needs of alcoholics are met in the best possible manner, including admission to general hospitals when this is necessary, but at the same time recognizes that the medical profession unaided cannot hope to deal with the manifold problems of alcoholism which cut across the traditional lines of professional responsibility. There is a pressing need for the development of locally based alcoholism rehabilitation centers which would provide a range of services appropriate to alcoholic patients at whatever stage of their illness they may be. Such services would include emergency medical care, outpatient clinic services, partial hospitalization service, detoxification centers and residential centers for certain categories of alcoholics. Physicians would obviously be responsible for certain aspects of services, but other professional persons, such as psychiatric social workers, nurses, vocational counselors, and psychologists are necessary in establishing these services.

The complete range of services in fact which have been outlined as comprising the program of a comprehensive mental health center must be duplicated for the alcoholic population. It is essential that counseling services be provided to the wives and husbands of alcoholic patients, and that consultation services be offered to other caretaking agencies and professional persons. The development of alcoholism rehabilitation services for industry is a key part of the program, and here the company physician may play a vital role in diagnosis and referral of the affected employee.

It seems desirable that alcoholism treatment programs be established as independent agencies because of the peculiar difficulties encountered in this type of treatment endeavor. At the same time it is clear that the medical and psychiatric aspects of alcoholic rehabilitation fall within the general classification of community mental health services, and care should be taken to insure that a close working relationship is maintained between alcoholism treatment programs and the other mental health services in the community, including staff contact through joint workshops and

seminars, to prevent professional isolation with its attendant undesirable consequences.

The term alcoholic may itself be a hindrance to the appropriate management of patients in that this pseudo-diagnosis may obscure the fact that there are a number of varieties of alcoholism, each requiring differing treatment approaches. The management of the destitute, homeless, "skid row" individual is an entirely different matter from that of the young executive in the early stages of alcoholism.

The question arises as to the extent to which the Committee may wish to concern itself with alcohol related problems other than those with purely medical connotations. There are a multitude of such problems such as alcohol and highway safety, alcohol and crime, alcohol and industry, alcohol and education, and the question of control of the sale of alcoholic beverages which are of public concern. It would seem that the Subcommittee on Alcoholism of the N. C. State Medical Society should concern itself primarily with assuring that adequate treatment, using that term in the broadest sense, is available for alcoholic patients, and that as a secondary responsibility it should keep well informed as to developments in these other alcohol related problem areas so as to be in a position at least to endorse legitimate recommendations which may come from other sources regarding these. A specific example is the divided responsibility which is found at the present time with respect to alcohol education and to some extent alcoholism rehabilitation, where education and rehabilitation programs are funded and administered by two separate agencies, namely the N. C. Department of Mental Health and its local comprehensive mental centers on one hand, the State and County ABC boards on the other.

D. E. Macdonald, M.D., Chairman

COMMITTEE ADVISORY TO NORTH CAROLINA DEPARTMENT OF MOTOR VEHICLES

Committee Activities—1968

1. Letter to the NEWS AND OBSERVER urging publicity to the drinking and driving problem. This the NEWS AND OBSERVER has done and done well, with feature articles and giving publicity to accidents involving drinking.
2. Represented Advisory Committee in meeting with Alcoholic Rehabilitation doctors with purpose of working out identification procedures for chronic alcoholics who drive.
3. Sent reprints to all Committee members entitled "What You Can Do About Drinking and Driving."
4. Sent to all Committee members photocopies of excerpt from FAMILY PHYSICIAN, reprinted from the AMERICAN JOURNAL OF PSYCHIATRY entitled "Fatal Automobile Accidents: Characteristics of Drivers," a comparison between drivers in fatal accidents and a comparable group with traffic records.
5. Met at several conferences including one at the Governor's office, assisting in establishing a Pilot Driver License Applicant Medical Evaluation Cen-

ter in the Research Triangle area, the operation of which will be under the direction and coordination of the Duke University Medical Center. This will be a joint effort between Duke University and agencies of North Carolina, especially the Department of Motor Vehicles, but will also include several other departments of State Government.

6. The minutes of the September 27, 1968, meeting of the Committee at Mid Pines Club, Southern Pines, are as follows:

Present:

John W. Morris, M.D., Chairman
James F. Newsome, M.D.
Harold D. Green, M.D.
Jack M. Rogers, M.D.
C. F. Siewers, M.D.

Guests:

Charles Nicholson, M.D.
Jesse Meredith, M.D.
Marvin Lymberis, M.D., Commissioner
Louise Parrish, MSSNC Staff
Katherine Langdon, MSSNC Staff

Absent:

Thomas E. Castelloe, M.D.
Allan B. Coggeshall, M.D.
John T. Cuttino, M.D.
James T. McRae, M.D.
John A. Wheliss, M.D.

After the meeting was called to order by the chairman, Dr. John W. Morris, he reported that the film originally scheduled as the first item on the agenda, was being held over until Sunday morning at 9:00 a.m. for showing. This was due to the fact that more physicians and lay people would be attending the Medical Evaluation Panel meeting and the chairman did not want the film to be repetitious.

The financial situation of the Committee was better than most reports. The N. C. Association of Insurance Agents, Inc. gave \$500 for expenses and \$525.94 was spent. The State Society allotted \$300 for expenses and therefore there was no problem with financing the Committee's activities. The \$500 has also been given for the following year by the N. C. Association of Insurance Agents, Inc.

Some problems arising from the Medical Evaluation Program is that a person who has had his license revoked for medical purposes blames the examiner, although all the examiner did was to fill out the form.

Dr. Morris stated that he had formally resigned from the Committee but as of the above meeting date he had not been replaced.

It was reported that a Board of Appeals had been set up for further evaluation of persons losing their licenses. The Board of Appeals has the authority to return the license if they wish to do so and think the license was unjustly suspended. The physicians on this board are: Charles Wilkerson, M.D., Raleigh, Chairman; Charles Vernon, M.D., Wilmington; Don Reibel, M.D., Raleigh; and Dick Pittman, Jr., M.D., Wilson. These appointments were made by the President of the State Board of Health.

A discussion followed on the fact that physicians should be paid by the state for expenses for advice to the state, especially those dealing with evaluation of cases. This Committee was appointed at the request of the Department of Motor Vehicles.

With regard to the Medical Review Board, it was found that 52 cases were reviewed from January 1, 1968 to August 13, 1968. Out of 52 cases, 32 licenses were restored and 20 were not restored for a total of 61% restored licenses, and 39% non-restored. Of drivers with alcohol problems driving privilege was restored in 14 and not restored in 15 (52% not restored).

A decision was made to develop a relationship with the Alcoholic Rehabilitation Division of the Department of Mental Health of which Dr. R. J. Blackley is Director. As to the thought that chronic alcoholics were not as involved in accidents as our Committee suspected, Dr. Morris sent bibliography including reprints and papers in different publications to Dr. Blackley. Special attention was called to the Department of Transportation report to Congress on this subject, issued in August.

Colonel Speed of the Highway Patrol called to the attention of this Committee the problem of the Red Cross calling on the Highway Patrol for help in transporting blood in emergency cases. The Highway Patrol feels that they are being asked to transport blood in other than emergency cases. This was also the conclusion arrived at after extensive study by the Medical Society of the State of North Carolina field representative, Dan I. Mainer. The Highway Patrol cannot stop transporting this blood without an alternative.

Dr. Morris had discussed this with the President of the Medical Society of the State of North Carolina before the meeting.

It was the consensus of this Committee that a plea for assistance should be made before any action was taken; therefore, no decision was made by this Committee at this time.

The Highway Patrol asked that the Committee Advisory to the Department of Motor Vehicles and the Medical Society back them on two items of legislation. Those being: (1) implied consent law and (2) define "drinking and driving."

It was stated that at times, on the roads of North Carolina, there are approximately 40,000 people per day without licenses on the highways.

In Virginia, the car is confiscated when a driver is caught after his license is revoked. We recommend impoundment.

At this point the 5 following recommendations were made to be presented to the Executive Council as needed legislation seen by the Advisory Committee:

1. Implied consent law.
2. Define "drinking and driving" in terms of alcoholic content of the blood by enacting legislation making it unlawful for any person in North Carolina to operate a motor vehicle on the public streets and highways with a concentration of .10 percent or higher in his blood. (This is wanted mostly by the Highway Patrol, along with the im-

plied consent law, because it would circumvent court trials and automatically take the license at once if the breathalyzer shows the .10 percent reading.)

3. Impoundment of car whenever a driver is caught driving after he has had his license revoked or suspended, unless the car is stolen. Funds adequate for additional personnel in Highway Patrol to enforce this law.
4. Mandatory blood alcohol on all drivers and pedestrians dying within 4 hours of a motor vehicle accident. Recommended that it be administered through the Medical Examiner's Office and required of all morticians before embalming or cremation or before the body leaves the State.
5. Permissive legislation to permit voluntary reporting to the Driver License Division by a physician of a patient, who, in the physician's opinion, had a medical or mental condition incompatible with safe driving unless the patient voluntarily surrenders his license. This would prevent a law-suit against the physician by the patient when the physician acted in good faith. We have a similar law in the "Good Samaritan" law.

The Committee discussed ways that young people could be rewarded for non-violations and non-accidents. It seems that many young people pay for other people's mistakes by having to be placed on assigned risk insurance at the time of receiving their licenses. It was thought that possibly a letter may be written to Mr. Dick Brantley of N. C. Association of Insurance Agents, Inc., and ask him to send it along to the insurance companies that this committee endorses the idea of rewarding the young people and asking them to consider ways and means for this idea.

The Committee through the Medical Society condemned the practice of car manufacturers designing cars with high horse power and the following was sent as information to the Executive Council:

Urge strong resolution by the Medical Society condemning the continued practice by automobile manufacturers to produce cars with high horsepower, speeds in excess of 75 miles per hour, and advertising directed to the driver stressing speed and power rather than careful and defensive driving.

As to the problem sent to the Committee's attention by Dr. Dees, as to requiring seat belts in school buses, it was decided that no action was to be taken at this time since the National Safety Council is working on the problem now.

Dr. Rogers, a new member of the Committee, was welcomed to the group.

There being no further business, the meeting was adjourned until the Saturday night meeting with the Medical Evaluation Panel and State Board of Health.

6. No word has been received by the Chairman as to what action, if any, was taken by the Council on recommendations of the Committee that the North Carolina Medical Society support certain

items of legislation which the Committee, after several years of study, felt was necessary to aid in better enforcement of existing traffic laws and better implementation of public support of the traffic safety program.

7. Maintained liaison with AMA Committee on Medical Aspects of Traffic Safety. Requested and received information relative to legislation proposed by North Carolina to change statutes as they pertain to medical and mental conditions which impair driving ability.
8. Advised with the Appeal Board of the State Board of Health which hears appeals from individuals who have lost their driving licenses as a result of medical evaluation.
9. Met with Dr. Newsome and committee representing the State Board of Health, the North Carolina Highway Patrol, the Ambulance Attendants Training Program, Civil Defense—to help plan a program to inform physicians on certain activities of emergency medical problems at May 1969 meeting of the North Carolina Medical Society.
10. Joined the American Association for Automotive Medicine in order to maintain close liaison with the medical group which has been most active in bringing about the installation of safety equipment in late model vehicles.

John W. Morris, M.D., Chairman

COMMITTEE ON NECROLOGY

The Committee on Necrology will report at the opening session of the House of Delegates on May 18, 1969, during the Memorial Services.

W. Otis Duck, M.D., Chairman

COMMITTEE ON NEGOTIATIONS

The Committee on Negotiations of the Medical Society of the State of North Carolina, whose function is to review with third parties problems of differences which have been referred to it has, during the fiscal year of May 1968 to May 1969, not found it necessary to hold meetings because no third party areas of negotiation have been referred to it.

Thomas Dameron, M.D.

Hubert Poteat, M.D.

Wm. F. Hollister, M.D., Chairman

COMMITTEE ON NOMINATIONS

The Committee on Nominations will furnish to the President a sealed report at least two weeks prior to the meeting of the House of Delegates, May 18, 1969.

This sealed report will be opened by the President at the First Meeting of the HOUSE OF DELEGATES, Sunday, May 18, 1969, 2:00 p.m., in the Cardinal Ballroom, The Carolina, Pinehurst, North Carolina, in accordance with the provisions of the Constitution & By-Laws, Chapter V, Section 2 and Chapter X, Section 4.

Charles B. Wilkerson, Jr., M.D., Chairman

COMMITTEE OF PHYSICIANS ON NURSING

The Committee of Physicians on Nursing has been very busy. During the past year there have been three meetings: (1) September 27, 1968,—Mid Pines Club; (2) December 5, 1968,—High Point Memorial Hospital and (3) February 26, 1969,—Sir Walter Hotel, Raleigh.

The first meeting which was held at Mid Pines, had further discussion of legislation relative to DIPLOMA SCHOOL NURSING. It was finally decided that the Legislature should be asked to increase the financial support for nursing education in the Diploma Schools from \$100 to \$1000. It was further decided that the North Carolina Hospital Association, and the North Carolina Conference of Nursing Schools be asked to give strong support for the passage of such a bill, along with the support of the Medical Society.

The following resolution was endorsed at the same meeting:

The Diploma Schools of Nursing asks the North Carolina Board of Nurses to make an exception to permit selected experienced Registered Nurses to serve as assistants to the instructors in special clinical areas, even though they are not holders of an Academic Degree nor enrolled in an Academic Degree Program, when the nursing school has a bona fide effort to recruit a full complement of instructors with degrees, and have been unable to find them because such instructors are in short supply and not available.

Another item which was considered at the same meeting was a discussion of the promotion of an Annual Nurses' Recognition Day.

Recommendation was made to approve the suggestion of the Nurses' Recognition Day each year and to send the outline of procedure for initiating this Recognition Day to the Public Relations Committee, and ask their implementation of this suggestion.

The suggestions were as follows:

1. Ask the Governor to proclaim Nurses' Recognition Day in the State.
2. Ask the Mayor of this community to make a similar proclamation.
3. Select an Honor Nurse of the Year in each community.
4. Prepare the local newspapers and radio and television station special news releases giving the highlights of the proposed observance and the community roles played by nurses.
5. Assist nursing leaders in obtaining public service radio and television air time in connection with the observance.
6. Encourage Hospital Administrators to commemorate the observance with hospital activities. Each nurse, for example, might be presented with a carnation or corsage.

Physicians, Hospital Administrators and Board Members could participate in special ceremonies.

A display of Careers literature for Future Nurses could be arranged.

The Woman's Auxiliary to the Medical Society can be most helpful to this activity.

7. Encourage local civic organizations to participate in this Recognition Day at their regular luncheon or dinner meetings.

8. Arrange for staff members, wherever and whenever possible, to speak before community organizations to detail reasons for the Recognition Day, and to emphasize the importance of the work nurses are doing.

Another item, which was given consideration, was a resolution concerning hospitalization. The following recommendation was made by Dr. W. D. James, and seconded by Dr. H. L. Brockmann:

That the Committee go on record as endorsing the recommendations of the **ad hoc Committee of the North Carolina Committee on Patient Care**, which was unanimously adopted by the Executive Committee of the North Carolina Committee on Patient Care in July, 1968, anent findings on visitation project study involving hospitals in Forsyth and Beaufort counties.

The provisions in these recommendations can be secured by writing Dr. John L. McCain of Wilson, North Carolina.

Finally, a discussion was held regarding a state-wide conference of hospital administrators, nurses and doctors. It was the feeling of the Committee at that time that much information was needed before the idea was adopted.

After contact with the AMA Committee on Nursing, it was decided that a meeting of this group be planned. After giving this matter serious consideration, it was decided to have a meeting of the hospital administrators, doctors and nurses, rather than a meeting of the doctors and nurses only, according to the plans set forth by the American Medical Association.

Accordingly, the AMA Committee on Nursing was contacted and the idea of a meeting of administrators, nurses, and doctors was approved. It was decided to contact other health organizations, nurses and administrators and arrange such a meeting.

The idea was also suggested that perhaps in another year it might be more convenient to have a meeting just of doctors and nurses as had already been suggested and carried out by several states. The arrangement of such a meeting was left in the hands of Dr. John McCain of the North Carolina Patient Care Committee, who would transmit the approval of this move of the Medical Society to the Patient Care Committee. It was suggested also, that Mrs. D. Ann Sparmacher, Secretary of the AMA Committee on Nursing, be invited to attend the initial planning meeting for the Conference.

It was reported at the meeting in High Point that the Executive Council of the Medical Society had considered and approved the recommendation of the Committee of Physicians on Nursing regarding NURSES' RECOGNITION DAY:

"To move that the concept of endorsing a NURSES' RECOGNITION DAY be accepted, and that the Public Relations Committee be asked to see how it may help in implementing this."

It was brought out, also, that Dr. Philip Naumoff,

Chairman, Committee on Public Relations, had requested the Nursing Committee to proceed with the planning of NURSES' RECOGNITION DAY, and that the Committee on Public Relations would assist them with a promotion for publicity.

During the discussion of this matter, Dr. John Bridgers of High Point offered to take the suggestions as already made at the September meeting and incorporate them in some sort of plans. These plans would be distributed to the Committee on Nursing, Dr. Naumoff, Mr. William Hilliard and others, for suggestions.

It was also decided that the month of April, 1970, would be the best month in which to promote the NURSES' RECOGNITION DAY.

The suggestion that Dr. Eston R. Caldwell, Jr., be considered for re-appointment to the North Carolina Board of Nursing was made. The vote for this was unanimous.

Another matter which was discussed and strongly favored was, Mr. Marion Foster, Executive Secretary of the North Carolina Hospital Association, call a meeting of the Nursing Committee of the Medical Society, the North Carolina Hospital Association, and the Conference of Diploma Schools of Nursing to discuss the matter of increasing subsidies for Diploma Schools of Nursing.

Dr. Brockmann's statement on "Nursing and Nurses' Education Today", was read by Dr. McCain. It was very favorably received and it was decided that every member of the Committee should receive a copy.

The final item on the program at High Point was a proposal by Dr. John Bennett, a member of the Committee of Physicians on Nursing, for a North Carolina Academy of Nursing. This had in consideration an improved method of training for nurses of Diploma Schools, a thorough course in basic sciences, and the specialties with the credits in case a nurse decided to go on to higher training leading to higher degrees later on.

This matter was further discussed at the last meeting of the Committee in Raleigh on February 26th. The discussion was lengthy and the idea of a North Carolina Academy of Nurses was favorably considered by all members of the Committee. The matter of discussing the plan with the other health organizations was discussed at length. Finally, a motion was made by Dr. J. Samuel Holbrook, seconded by Dr. John Bennett, as follows:

THE CHAIRMAN APPOINT A COMMITTEE TO CONSIDER THIS MATTER FURTHER, AND TO CONSULT ANY HEALTH SOURCES THEY DESIRED, AND TO REPORT TO THE CHAIRMAN.

The motion was carried unanimously.

It was decided not to present the plan to the Executive Council on a formal basis until after September 1969, and all members of the committee were urged to discuss it with their Councilors in the meantime.

The report has not yet been received.

Dr. John D. Bridgers presented a detailed nine-page report dealing with the program for the NURSES' RECOGNITION DAY. Each member of the Committee

was to have a copy of the report with the idea of making certain of additions and deletions of the plan as presented by Dr. Bridgers. The matter of financing the plan was also discussed. It was moved and seconded that Dr. Bridgers to commend for the plan, accept and submit it to the Executive Council of the Medical Society and other appropriate agencies. This motion carried unanimously.

Further discussion was had on the appropriations asked for in connection with the Diploma Schools of Nursing.

The Hospital Association had considered \$1000, rather than \$100, as it stands, should be asked for. On the advice of our attorney, Mr. John Anderson, it was felt that the Hospital Association should draft the bill, requesting for the grant of \$1000.

Names and addresses of the Joint Subcommittee on Appropriations of the 1969 General Assembly were to be sent to each member of the Committee. It has since been reported that the recommended grant would be about \$400 per year for each student nurse rather than \$1000.

Fred C. Hubbard, M.D., Chairman

COMMITTEE ON CIVILIAN MEDICAL CARE— MILITARY PROGRAMS (OCHAMPUS)

The Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) operated on an expanded basis during 1968 as evidenced by a comparison of the number of physicians claims and amounts paid during the years 1967 and 1968, respectively. This increase was due to the expanded scope of the program for active duty dependents and a program of inpatient and outpatient civilian health care effective January 1, 1967 for retired military families and the dependents of former service members who died while on active duty or in a retired status.

The Annual Report of the Fiscal Agency—North Carolina Blue Cross and Blue Shield is attached and incorporated as a part of the Committee Report. This report shows comparative statistics for the past two years and indicates that during the past twelve years a total of \$27,562,751 has been paid to North Carolina physicians and hospitals and other providers of care—a significant factor in support of free choice of community hospitals and physicians.

Beginning with services provided on and after February 1, 1968 the program has been administered on a usual, customary and reasonable fee basis under a two party contract between North Carolina Blue Cross and Blue Shield, Inc. and the Office of Civilian Health and Medical Program of the Uniformed Services. By previous action and on recommendation of our Committee, the Council has endorsed Blue Shield as the continuing fiscal intermediary and authorized our Committee to provide supervision for adjudication of claims and to give advice and counsel in other professional matters as requested by Blue Shield. Therefore, a claims review sub-committee composed of seven physicians of representative specialties was appointed to meet with

Blue Shield for establishment of criteria and patterns of maximum reimbursements.

The Committee and claims review sub-committee have held meetings as needed and the chairman and members have consulted with one another by phone and letters frequently. Thus cases of an unusual and complex nature were considered individually to the mutual satisfaction of those concerned.

The usual, customary and reasonable concept as administered under the CHAMPUS has been widely accepted by North Carolina physicians and there have been few complaints. However, physicians not desiring to accept assignment, or not desiring to be subject to maximum reasonable allowance determination, are privileged to bill the patient direct. In such cases, Blue Shield is authorized to reimburse the patient in an amount not to exceed that which would have been paid the physician.

The customary and reasonable concept is a growing one and pertains to major medical, commercial coverages, Blue Shield and will probably be a factor in Medicaid. Therefore, the Committee believes that the North Carolina Medical Society will benefit from our continued relationship with this program. We will endeavor to see to it that the program continues to operate on the highest possible level of professional standards and we will see that the members of the Society are kept fully informed.

Mr. K. G. Beeston, Vice-President of North Carolina Blue Cross and Blue Shield, Mr. W. H. Wiggs, CHAMPUS Department Manager, and his staff have continued to give excellent cooperation and administration. The counsel and activities of Mr. James T. Barnes and his staff at the headquarters office of the Medical Society have been invaluable.

D. M. Cogdell, M.D., Chairman

ANNUAL REPORT—1968

TO: Committee on Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) of the Medical Society of the State of North Carolina:

Blue Cross and Blue Shield has completed its twelfth year as fiscal agent for reimbursement of physicians for care under CHAMPUS. During the period 1957 through 1968, \$13,110,051 has been paid to North Carolina physicians for 156,096 cases reported. Comparative statistics for physicians' payments for the years 1967 and 1968 are as follows:

	1967	1968
Paid to Physicians	\$1,251,386	\$1,614,640*
Number of Cases	14,433	16,634

*Does not include \$151,032 for 6,140 claims covered under the outpatient program.

The increase in the number of claims paid in 1968 as compared to 1967 is due to the continuing expansion and utilization of the comprehensive inpatient and outpatient program for retired service personnel, thus dependents and the dependents of former personnel who died while in a retired or active duty status which became effective on January 1, 1967.

Beginning with care provided on and after February

1, 1968, payment for professional services were based on the usual, customary, and reasonable concept. Administration is based on statistical data completed by the corporation as well as guide lines and determinations by the Medical Society CHAMPUS review sub-committee. Physicians have welcomed the change to usual, customary, and reasonable. However, if a physician does not choose to accept an assignment, all charges should be billed to the patient who can be reimbursed by Blue Shield for an amount not to exceed what would have been paid the physician.

Under a separate contract, the corporation reimburses hospitals for authorized civilian care provided beneficiaries under this program. From 1957 through 1968, \$14,234,013 was paid to North Carolina hospitals for 115,657 claims. The total paid to hospitals, physicians, and other providers of care since 1957 is \$27,713,783 for 283,844 claims.

We wish to express our sincere appreciation and gratitude to the CHAMPUS Committee and claims review sub-committee; its chairman, David M. Cogdell, M.D.; and to Mr. James T. Barnes, Executive Director of the Medical Society of the State of North Carolina for their cooperation and guidance in administration of the program.

K. G. Beeston, Vice-President
Blue Shield Activities

COMMITTEE LIAISON TO N. C. PHARMACY ASSOCIATION

The Committee Liaison to North Carolina Pharmacy Association met in September at the Annual Convale of Committees and Officers at Southern Pines.

At that time the members considered the problem of multiple prescribing of drugs for welfare patients and approved a proposal by Mr. Emmett Sellers, Director, Division of Medical Services, Department of Public Welfare, instituting control over multiple prescribing of drugs and the use of pharmacists monitoring and entry on recipients authorization card. These cards are held by all DPW recipients and with this a patient could not receive duplicate prescriptions.

The committee was in agreement with the North Carolina Board of Pharmacy that there should be some form of security from forgery regarding prescription blanks and recommended that a rubber stamp bearing the doctor's name, telephone number, and narcotic license number be used on all narcotics prescriptions in addition to the doctor's written signature when general hospital prescription forms are used.

A discussion concerning two surveys (a) Opinion Research Corporation on compendium prescribing and (b) NARD on MD preference ratio for non-generic drugs, resulted in a recommendation to the publishers of the PDR that drug companies that remove drugs from the market, but still continue to list these in the table of contents of the PDR would at least show some chemical description and content of the drugs.

As a result of a discussion on the history of mail order drugs, the committee conveyed the following mes-

sage to the Governor's Council on Aging and to W. J. Smith, North Carolina Pharmacy Association:

"Experience has shown that the interest of all citizens, including elderly, is best served when prescription needs are procured from traditional sources, namely, their local pharmacists."

The chairman of the committee participated in a two day seminar on Drug Abuse sponsored by the North Carolina Association of Professions in cooperation with the State Highway Patrol and the State Bureau of Investigation held in Chapel Hill in November. He appeared as a member of a panel which discussed the Role and Responsibilities of the Physician in controlling drug abuse.

John A. Payne Jr., M.D., Chairman

COMMITTEE ON PHYSICAL AND VOCATIONAL REHABILITATION

The Committee on Physical and Vocational Rehabilitation did not meet during the year, but did recommend the name of Edward H. Martinat, M.D., Winston-Salem, North Carolina as Physician of the Year for the Physically Handicapped.

H. Robert Brashear, Jr., M.D., Chairman

COMMITTEE ON PUBLIC RELATIONS

The annual meeting of the committee on Public Relations was held Thursday, September 2 at Mid Pines with the following actions taken:

1. Approved the Information Booth at the State Fair in October with an AMA exhibit and voted to continue the blood typing service using the North Carolina Association of Hospital Technologists, to whom we are most grateful.
2. Support financially and publicly the Science Health Fair Program.
3. Continue gift subscriptions of Today's Health to members of the North Carolina General Assembly, the Governor, Council of State, Supreme and Superior Court Judges, as well as all North Carolina colleges.
4. Approved support to the North Carolina Rescue Squad Association with the providing of trophies to the winners in first aid competition.
5. Recommended repetition of the AMA Speech Training course which was held in Durham April 24 & 25 in the Statler-Hilton Hotel. It was recommended that this be held in Winston-Salem at a time suitable to the AMA.
6. Arranged for proper publicity to Community Health week October 20-26, 1968.
7. Discussed the recommendation of Committee on Community Health regarding the "establishment of a speaker bureau for the purpose of conducting medical presentation to those organizations related to community health." The committee passed the following motion: "The Public Relations Committee recommends that each County be encouraged to provide speakers to various

civic clubs on health problems and that this be done on a local level."

Your chairman attended the AMA Institute on Public Relations as well as the second annual Socio-Economic Congress and recommends that County Societies send representatives to these meetings.

The annual Conference of County Medical Society Officers and Committeemen was held at the Carolina, Pinehurst, North Carolina, January 24-25, 1969. The total registration was 99 physicians and 18 non-physicians. This does not include auxillary members who attended the Saturday morning session. The 99 physicians came from 46 counties. The program this year was divided into discussions of Medical Society Public Relations, with the key address being given by Philip Lesly, public relations counsel of the AMA, as well as an excellent discussion of medical public realtions, by James R. Hickox, Director of the Program Service Department, AMA. Darrell Coover addressed the Friday night banquet and gave us a very informative discourse on proposed legislation and inter-governmental relationships.

The committee again wishes to thank Bill Hilliard, assitant executive director, and his staff for their continued valuable assistance in the functions of this committee and for the well-read Public Relations Bulletin.

Philip Naumoff, M.D., Chairman

ADVISORY COMMITTEE TO N. C. DEPARTMENT OF PUBLIC WELFARE

This committee has been concerned primarily with the ground work and implementation of the physician's participation through Blue Cross and Blue Shield with the North Carolina Department of Public Welfare on the costs of physician's services to welfare recipients.

Numerous meetings have been attended in an effort to keep down the red tape for doctors in filing patient claims through Blue Cross and Blue Shield to the Department of Public Welfare. An effort has been made to try to keep the doctors of the State of North Carolina informed of the project and encouraged to assist. It is too early to judge as to whether any value will be forthcoming.

W. T. MacLauchlin, M.D., Chairman

RETIREMENT SAVINGS PLAN COMMITTEE

The Retirement Savings Plan Committee is pleased to report on its activity during the past year and also on the Retirement Savings Program operating under its supervision.

The year ending December 31, 1968, was the third full year that the NORTH CAROLINA MEDICAL RETIREMENT SAVINGS PLAN has been in operation. At that time assets of the PLAN totaled \$891,460 and there were 275 people participating in this retirement savings program. The previous year at the end of 1967 there were assets of \$533,497 and 187 participants.

The tremendous growth in the assets of the program

WACHOVIA BANK AND TRUST COMPANY
 MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA
 RETIREMENT SAVINGS PLAN AND TRUST
 STATEMENT OF CONDITION

December 31, 1968

ASSETS

Cash		\$ 44,103.75	
Accrued Dividends and Interest Receivable		2,099.75	
Accounts Receivable		3,236.36	\$ 49,439.86
Investments:			
	<i>Cost</i>	<i>Market</i>	
		<i>Valuation</i>	
Common Stocks	\$729,990.39	\$770,020.84	
Temporary Bonds			
Retirement Savings Plan and Trust	72,000.00	72,000.00	842,020.84
	<u>801,990.39</u>		
			<u>\$891,460.70</u>

LIABILITIES AND NET WORTH

Liabilities			
Due Wachovia Bank and Trust Company fees	\$	286.84	
Due Minnesota Mutual Life Insurance Company contribution for December		946.76	\$ 1,233.60
Net Worth			
Member's Accounts—Stock Account			851,820.36
Member's Accounts—Pending Account			38,306.74
			<u>\$891,460.70</u>

was partially attributed to the fact that a participant could deduct the entire amount of his deposit up to \$2,500 from his personal income tax for the first time. Previously only one half of this amount was deductible for income tax purposes.

A Statement of Condition is attached to this report as part of the permanent record.

The Committee met at the conclave at Mid Pines in September, 1968, and at that time various operations of the PLAN were considered. There was a report from the trustee about activity in the PLAN and also about the investment program of the Stock Fund. Certain plans were made at that time to keep the membership of the Society more fully advised on the Society's retirement program in the future.

In October, 1968, a business reply card was included with the Public Relations Bulletin which went to all members inviting them to obtain additional information on our Keogh savings program. There was a tremendous response to this invitation and many physicians and their employees entered the PLAN following this.

In 1969 a revised brochure concerning the NORTH CAROLINA MEDICAL RETIREMENT SAVINGS PROGRAM will be sent to each member of the Society and another business reply card will be included in case a member desires further information.

During the past year the Committee detected some evidence that some participants in the program were misinterpreting the investment objectives of the Equity Stock Fund. Working with the trustee the Committee has approved a general investment objective for the Stock Fund to be one that is to acquire good quality stocks with favorable long term outlook which represents a good value at the time of purchase. Members of the Society are also reminded that our PLAN also offers a fixed income plan in the form of an Insured Annuity Program which is managed by Minnesota Mutual Life Insurance Company. Participants interested in stability of their deposits should consider the fixed income plan and those interested in potential growth along with its risk should be interested in Stock Fund.

The PLAN experienced its first payout in 1968. This was due to the death of a participating physician member. No payout has yet been made to a physician for retirement purposes.

The PLAN is experiencing some switching by participants. In a way this is similar to what many call "hop-stocking." That is a situation in which an investor becomes dissatisfied with the performance of his holding and hops over to another one hoping for a better outcome. Our PLAN has experienced participants moving out of our plan to other plans but has also experienced members moving from other plans into our plan during the past several years. We anticipate that there will be a 2 to 3 percent switching activity in our program each year for various reasons.

The Committee is pleased with the rapid growth of the PLAN considering the large number of Keogh plans made available through banks, insurance companies, mutual funds and others. We believe that the economies incorporated in the operation of this retirement savings program will culminate with substantial benefits in the 10 to 20 years in which participants are presumably saving for their retirement.

The tremendous growth of the assets of the program in the past year and the fact that most of these deposits were made in the last few months of the year will distort the performance picture of the PLAN as it is recognized that all funds were not available for the entire year for timely purchasing and for income.

Jesse Caldwell, M.D., Chairman

SUB-COMMITTEE ON MEDICAL ASPECTS OF SPORTS

The Sub-Committee on Sports Medicine has maintained a schedule of meetings in accordance with guidelines of the State Medical Society, and I am happy to report that this is an active committee.

I am somewhat in doubt as to the status of this committee, inasmuch as a request was made at the conclave of Committee meetings of the State Society at Southern Pines that this committee be henceforth established as a full committee and not a sub-committee, and that it be withdrawn from a membership or part of the School Health Committee. No information has been sent to me relative an affirmative or negative vote by the Executive Council on the status of this committee, subsequent to that recommendation.

In spite of these facts, certain programs have been adopted, followed through, and are in progress at this time.

I attended and took part in a very active regional meeting on Sports Medicine in High Point, North Carolina, in the spring of 1968, at which time coaches and trainers from the schools in that area were invited to attend the meeting, and its planned program, designed for an upgrading of sports coverage and protection by the medical staff of the region. Diversified subjects on many aspects of sports medicine were covered, but all were directed at protection of the athlete, and I feel were carried out with an air of cooperation and better understanding between the medical men interested, as well as the participating coaches and their staffs. Among the subjects touched upon and discussed during the evening were those of individual player protection, individual player training, the need for an adequate physical examination prior to sports participation, the need for qualified and trained coaching opinion, outstanding, as far as the guests' participation, and I personally felt it represented a springboard for other future regional meetings throughout the state.

In October of 1968, the North Carolina Orthopedic Association met in Southern Pines, at which time I

was possible for Drs. Frank Wilson, Chairman of the Department of Orthopedic Surgery at Chapel Hill, Dr. F. Wayne Lee of Charlotte, and myself, to discuss matters basically pending before the committee, and the need for a better definition of this committee's status. The request was made that Dr. Donald B. Reibel of 600 Wade Avenue, Raleigh, North Carolina, be made a member of this committee, and this request was forwarded to Dr. Robert Ross, who in turn forwarded it to the incoming President for action. No action as yet.

Throughout the 1968 football season, I made an attempt to visit as many football games in the coastal area as possible, and at the same time as many meetings as possible, of coaches, referees, and umpires, and tried to learn some of the basic ground rules that exist in the far-flung areas, where football is played today, as one of the major sport problems we have.

Since September, 1968, I have been an orthopedic consultant to the University of North Carolina athletic group, which is currently studying, under Federal grant, 50 high schools in this state who participate in football. Data of the injuries, method of determining the origin, cause and extent of same, and medical treatment as well as coverage, was made available to me. I will participate in a meeting on April 18, 1969, which will summarize the data to date.

I attended the American Medical Association's annual all-day session on Sports Medicine this past year, 1968, held in Miami Beach, Florida, on December 1. This was an outstanding meeting, and here again, particular emphasis was placed on the sports injuries, in the contact sports, and the attempt at prophylactic measures being taken to prevent these injuries from being as serious as they now present themselves. In January, 1969, I attended the meetings of the American Academy of Orthopedic Surgeons on its sub-committee on Sports Medicine, and further participated in discussions and analysis of technique and methods that might in the future prevent the seriousness of injuries currently plaguing contact sports, such as football.

Recommendations: I feel that the State Medical Society should be appraised of data that can be presented from facts already known by analysis of high school football injuries in 1968. I propose from this information an active "Push Program" be sponsored by the State Society, to upgrade a program in phases of:

1. More thorough and appropriate pre-examination standard.
2. Better supervision of the facilities utilized for contact sports—and this to include a careful analysis of the school's potential to participate in a contact sport, such as football, which requires a minimum of 26 participants on the varsity level.
3. A more careful look at the physical facilities available for participation in these contact sports, that are known to do body harm, and in particular to be certain that the facilities pass a minimum standard; this will probably require inspection by the State Health Department, or by the Committee on Sports Medicine,

(if such a Committee is deemed advisable) if approved by the Society.

4. Finally, coaching ability of the various schools should be carefully assessed, in order to protect the sport of football basically, as well as the individuals participating, lest individuals with inadequate training be allowed to assume the responsibility for several student body contact sports, which have built-in hazards of physical disability potential.

James R. Dineen, M.D.

COMMITTEE ON SCIENTIFIC WORKS

The Committee on Scientific Works convened at 9:00 a.m. in the Terrace Cottage in the Mid Pines Club at Southern Pines on Thursday, 26 September 1968. Present were Mr. James T. Barnes, Executive Director, Medical Society of the State of North Carolina; Dr. Lynwood Williams, Commissioner; Dr. Leonard Palumbo, a member of the Committee; and Dr. Warner Wells, Chairman. There was a good attendance of consultants represented by Section Chairmen, including Dr. Ted Scurletis, Dr. Annie Louise Wilkerson and other members who came in and out at varying times. We had the expert assistance of Mrs. LaRue King, who acted as Recorder.

Before entertaining suggestions for the 1969 Meeting, the audience was advised that the program of 1968 was well received although considerable concern was expressed for the poor attendance. Commissioner Williams stated that he would convey our sentiments to the Executive Council. This was done and it was decided by executive order that the Scientific Session would be limited to the mornings only, and that the afternoons would be reserved for recreation and relaxation. This led to some change in the format of the General Session which will be noted hereinafter.

Taking advantage of suggestions from President Welton, members of the Executive Council, Section Chairmen, and Executive Director Barnes, it was suggested that the program be centered around the new Medical Examiner System in North Carolina under the sponsorship of a new State Medical Examiner, Dr. Richard P. Hudson; Highway Safety and Disaster Medical Care under the direction of Dr. James Newcome and Dr. George A. Watson; and Manpower Needs with regard to Allied Professions of Medicine, hopefully under the sponsorship of Dr. Darrel J. Mase, Dean, College of Health Related Professions, University of Florida.

Commissioner Williams advised us that he would convey our recommendations to Executive Council and President Welton.

The Program for the General Session which will convene at the May meeting of The Society in Pinehurst:

Monday, 19 May 1969

11:15 a.m.—The Medical Examiner System in North Carolina. Dr. Richard Page Hudson, Jr., M.D. in association with a discussion by

the Medical Examiner of Virginia on Toxicology and the Doctor.

12:40 to 1:00 p.m.—Address. President David Goe Welton, M.D.

Tuesday, 20 May 1969

11:15 a.m.—Address. Dr. Dwight Wilbur, President of the American Medical Association.

11:45 a.m.—Problems in Dermatology by Dr. J. Lamar Callaway, Professor of Dermatology, Duke University Medical Center.

12:15 p.m.—The Training of Allied Health Professional Personnel. Dr. Darrel J. Mase, Dean, University of Florida.

Wednesday, 21 May 1969

9:00 a.m.—The North Carolina State Board of Health Conjoint Session, Dr. Jacob Koomen, North Carolina State Health Officer.

9:30 a.m.—Awards, Scientific Exhibits

10:00 a.m.—Prevention, Transportation, and Treatment of Accident Victims and Disaster Medical Care by Dr. James F. Newsome, UNC School of Medicine, and Dr. George A. Watson, Chairman, Committee on Disaster Medical Care, Durham, N. C.

11:30 a.m.—Inaugural remarks by in-coming President, Dr. Edgar T. Beddingfield, Jr.

12:00 noon—Installation of new officers.

Warner Lee Wells, M.D., Chairman

COMMITTEE ADVISORY TO STUDENT AMA CHAPTERS

Again the SAMA Committee can report its sectional meeting at the State Medical Society meeting in 1968 was a success, in size the largest section of the State Medical Society meeting, it was also a meeting of high quality. This committee met in Pinehurst in the fall. Subsections had several meetings in fall and winter to plan the May 1969 sectional meeting, and to encourage communication among students and county societies as well as the state organization.

Attempts begun in the fall to interest county chapters in having SAMA members in attendance and to put on a program and contrary-wise for student chapters to invite members of the State Society to participate in their activities bore some fruit. The Greensboro Chapter had Jay Cook, a Duke Senior and SAMA Program Chairman, for an evening. He was provocative and made an excellent speech explaining medical student activism. It seemed the same as practicing physician idealism. Before, then and since it has become apparent there is greater interest in such interchange now than ever. It is also apparent quality participation by students in organized medical activity today is greater in North Carolina than it was ten years ago. It is probably ahead of participation in other states. The promise also is to be greater and better in the years just ahead. If any success is to accrue from this increase in activity, it must be said now that it is due to the thoughtfulness of leaders of the State Medical

Society of North Carolina for encouraging and underwriting student activity in this area.

William P. J. Peete, M.D., Chairman

AD HOC COMMITTEE ON TASK FORCE ON TITLE XIX

The Ad Hoc Committee on Task Force on Title XIX met at the annual conclave at Mid Pines on September 27, 1968. In addition, members of the Committee have had other meetings with representatives of state agencies to consider the likely implementation of Title XIX by the current General Assembly.

At Mid Pines the Committee reviewed the provisions of Public Laws 89-79 and the 1967 amendments to the Social Security Act. Under Federal law each state must implement the program no later than January 1, 1970.

The problems of administering Title XIX were discussed at length. The state agency to administer the program in North Carolina has not as yet been designated. The position of the Medical Society of the State of North Carolina, which supports the designation of the State Board of Health, was reaffirmed. It was observed that the Department of Welfare has been aggressive in seeking this designation and there has been little evidence that the Department of Health, until recently, has continued aspirations for the assignment. The Advisory Budget Commission in their report, following the action of most states, has recommended that the Department of Welfare administer the program for Title XIX in North Carolina. The Committee, therefore, has not been too energetic in taking sides on this issue. We wish to avoid disfavor with or antagonism of either Agency with which we, of course, must deal later. The position of the Medical Society, nevertheless, is unchanged.

The Committee considered the problems of implementation as it concerned the Hospitals of the state and those of our teaching institutions. It had the benefit of consultation with representatives of the North Carolina Hospital Association and the directors of our Medical Schools hospitals. It concluded that the provisions of the program ought to be on the number of people eligible rather than on the duration of benefits. The teaching hospitals have an unusually heavy load of indigent patients and the Committee supports a basic reimbursement system, the same for Title XVIII and XIX so designed as to complement the welfare program already in operation.

In the consideration regarding the matter of a fiscal intermediary the Committee favors the use of a fiscal intermediary arrangement and suggests investigation of the possibility of an underwritten insurance plan.

There was much discussion as to whether or not the Medical Society should make recommendations as to the scope of services of any Title XIX program and just what the Society's position should be. It was recognized that at this time none knew what the General Assembly would offer nor how effective a funding of the Title XIX program would have. It was thought that the General Assembly will be conserva-

tive and cautious in its approach and it is doubtful that eligibility standards or scope or services will be substantially changed from that of the present.

It was concluded that it would be desirable for the State Medical Society to support some formula for the entire Title XIX program. The Committee recommends that the position of the Medical Society as indicated in the following three areas be approved as reflecting Society policy:

1. That the Title XIX program should include the Basic Five required services plus the present drug program and that the possibility of a dental program be explored.
2. That eligibility level not be any lower than the presently effective level for indigent and medically indigent and request that the State be encouraged to investigate the financial possibilities of raising the eligibility level for medical indigency.
3. That the duration of services listed (the basic five) be of unlimited duration dependent only on the medical needs of the patient but encompassing a plan for critical review of utilization by the purveyors (peer groups) at pre-determined levels.

The Society's position, affirmed by earlier action of the House of Delegates, that we would expect "usual and customary" compensation for services rendered has been repeatedly emphasized to the Department of Administration and other state officials. We have reason to believe that our position in this matter will be respected. It is recognized that some members of this Committee have broad knowledge and competence in the understanding of the provisions of Title XIX. One, in particular, has been most helpful in giving counsel and advice, upon request, by certain legislators and agencies of state government. Finally the legal counsel for the Society has been most helpful in our considerations.

Possibly by the time of the meeting of the House of Delegates this report will be in need of updating and revision.

George W. Paschal, Jr., M.D., Chairman

UTILIZATION COMMITTEE

The Committee on Utilization of the North Carolina Medical Society has been constantly concerned with the need for aid to physicians, hospital administrators and medical record librarians of North Carolina in the area of utilization review.

A Utilization Review Plan approved and in operation is required now by the Joint Commission on Accreditation as well as the North Carolina State Board of Health. Since this year recertification of all facilities participating in Medicare was necessary an on-sight survey of each facilities, utilization review plan in operation was mandatory. The above mentioned need thus became very acute. In an effort to satisfy this need, two programs were carried out by the committee during the past year.

On May 22, 1968, a memorandum was sent to the Chairman, Hospital Utilization Review Committee, Hospital Administrator in all of the hospitals in North Carolina, by your chairman and Dr. T. D. Scurletis, Director of the Personal Health Division of the State

Board of Health.

A brief summary of the memorandum: Results of surveys already made by the State Board of Health were reported. Minor deficiencies found were cited and suggestions as to corrections were pointed out. Changes in the utilization review plan whereby time of physician members could be saved and more effective and accurate reporting could be accomplished were recommended. This memorandum was well received and reportedly was found to be most helpful.

The second program, one of greater magnitude, began with widespread interest in having educational, regional meetings throughout the state where well-informed speakers could cover all the facets of utilization review for the benefit of representatives of the various hospitals and other facilities attending. Stimulated by this interest the utilization committee of the medical society held a series of meetings to discuss methods and techniques to accomplish such educational programs. These meetings involving the State Board of Health, Blue Cross, Blue Shield, the hospital association, extended care facilities, and the medical society felt that regional meetings throughout North Carolina would best accomplish the intended purpose. On September 28, 1968, the committee on utilization, meeting at Mid-Pines, reviewed in depth the location of these regional meetings, material to be presented, and proposed speakers. The proposal was approved and subsequently submitted to the council and approval was obtained there.

In November, meetings were held in Greenville, Raleigh, Fayetteville, Asheville, Charlotte and Winston-Salem. The title of the program was, "Simplified Approaches to Utilization Review Functions." Four speakers were used at each of the meetings. One of the members of the utilization committee presented an introduction outlining the functions of, aims, and necessity for a utilization review committee in all medical facilities. The second speaker, Dr. T. D. Scurletis, talked on, "Criteria for utilization review, (basic requirements and purpose.)" The third speaker was a hospital administrator in that particular area who spoke on, "Review of Utilization Review Activities and Experiences of the Fiscal Intermediary." The fourth speaker at each of the meetings was Dr. Robert S. Myers, Southern Pines, N. C., who gave a very informative discussion on, "Staff Organization for Effective Utilization Review." and also discussed, "Staff By-Laws changes and accreditation problems."

The attendance was excellent at all of these meetings. Physicians, hospital and nursing home administrators, medical record librarians and members of the governing bodies of the hospital were in attendance. Appreciation was expressed by those in attendance for presenting this very timely and greatly needed program. This program is being submitted to the North Carolina Medical Journal for publication as a result of numerous requests throughout the state from those who were not able to attend either of the six regional meetings.

The Utilization Review Committee will continue in its efforts to help in every way possible the local utilization review committees throughout the state.

H. Fleming Fuller, M.D., Chairman

COMMITTEE ON RELATIVE VALUE STUDY

The Relative Value Study Committee met at Pinehurst September 28, 1968. The original background and objectives of the Committee were reviewed. Faults of the developed program were discussed, the solution of most of which seemed to be potentially resolved in the new California Revision which North Carolina will copy when it is published some time during the winter. The following recommendation was made and sent to the Executive Council:

It is the consensus of the Committee on Relative Value Study that the revised edition of the California Schedule presently being prepared should be used as the base for the new North Carolina Relative Value Study.

The Committee recognizes certain defects both in the relativity and the scope of the schedule and is aware that specialty groups, both in North Carolina and the country as a whole, are undertaking corrective studies which it believes should be properly directed to California for their consideration and subsequent revisions.

The Committee feels that there is an urgent need for the education of the individual members of the Medical Society on the nature of the Relative Value Study; that it is an instrument for office consideration in the determining of the proper relationship between fees for different procedures and for the determining for charges, and that by individual variations of unit and unit value, the doctor has available an instrument for his own personal charges at any given time; that in spite of the professional objection to third party participation, such third party participation does exist and will continue to exist and expand, and the third party will have available the Relative Value Studies for controls in the broadest possible sense.

It was apparent even in the Committee itself, that there is abundant opposition in the profession at-large, that there are serious misunderstandings and substantial uneasiness concerning the use to which the Relative Value Study may be put.

In spite of these, it is the present sense that the Relative Value Study has substantial value to the Society as a whole and to the necessary economics of medical practice.

Alfred T. Hamilton, M.D., Chairman

REPORT OF ADVISOR TO MEDICAL ASSISTANTS

It is with great pleasure that I report that the North Carolina Association of Medical Assistants is increased to nine chapters and continues to grow in strength and stature. As Advisor, I participated in the annual convention at Morganton which was addressed by Dr. Robert A. Ross, then president of our State Society. Our present president, David G. Welton, has been elected a director of the National Association of Medical Assistants. We must continue to give our full support to this worthy organization.

Philip Naumff, M.D., Advisor

Report to Medical Society of State of North Carolina on Activities of North Carolina Association of Medical Assistants

In April 1968 new officers and committee chairmen took over the duties of NCAMA. It has been the primary purpose of the NCAMA President to try to unite all factions of NCAMA. This has been accomplished to some extent.

Many other things have been accomplished so far this year. Our state publication has been revamped with the aid of N. C. Blue Cross-Blue Shield, Inc. and it now has a new look and is a worthwhile publication. We have received financial support for *Tempo* from N. C. Blue Cross-Blue Shield, Inc. and Pilot Life Insurance Company.

In early April we investigated the possibilities of a State Charter from the North Carolina Secretary of State and found that since we were still a small organization this would be of little, if any, value to us at this time.

We also are in the process of getting approval of NCAMA's House of Delegates for an official state pin and emblem for our stationery. We are now ready to call a special session of the House for this matter.

On May 11-15, through the generosity of the Medical Society of the State of North Carolina, NCAMA manned a booth at the Annual Meeting of the Medical Society and here we made many new contacts for NCAMA. We sincerely appreciate the generosity of the Medical Society in allowing us this booth space.

In April when the President set up the Membership Committee it was divided into 10 districts with a Vice Chairman to head each district. Much work has gone into this Committee and it is paying off. To date we have one new chapter—Rockingham Association of Medical Assistants—and have hopeful prospects of two more—Kinston and Smithfield. We have made contacts and have much interest in the Asheville, Hendersonville, and Wilmington areas. We have also added 12-made of past members to ascertain why they did not 14 new members-at-large since April. A survey was rejoin and this gave interesting facts.

In Board meetings we have been establishing concrete policies for NCAMA regarding nomination of officers, presentation of awards, publication dates for *Tempo*, and have established a Bonus Savings Account in preparation for the 1969 AAMA Convention in Hawaii so NCAMA can be represented there.

Each county was again assessed \$100 to pay the expenses of 1968 NCAMA delegates to the AAMA Convention in Ohio. We will have a full delegation this year and the NCAMA President is also a member of the AAMA Board of Trustees.

We submitted, with his approval, the name of David G. Welton, M.D., as a candidate for the AAMA Advisory Board. This election will be held during the AAMA Convention in early October, 1968. (Dr. Welton was elected.)

We also submitted to the AAMA President-elect the names of two NCAMA members to serve on AAMA

committees and these were accepted pending approval of the AAMA Board.

The NCAMA Convention is to be held April 12-13, 1969, at the Holiday Inn in Salisbury, N. C. Most of the plans for it are in the making and many of them complete.

The Constitution and By-laws Committee of NCAMA has met once and reviewed our Constitution and By-laws. It was felt it was useless to work on NCAMA's Constitution and By-laws until the AAMA Convention is over so we can conform with the AAMA Constitution.

On Sunday, September 15, 1968, NCAMA had a workshop in Concord attended by thirty-eight members, members of the Advisory Board and other invited guests. This was our first workshop since February, 1965, and it was most successful.

Many counties are continuing their night courses at technical institutes or community colleges, and the NCAMA members continue to have a keen interest in their continuing education and eventual Certification.

Again, we wish to express to the Medical Society our sincere appreciation for your support to our organization as we continue to try to upgrade the Medical Assistants' program, thereby helping to give better health care to the citizens of North Carolina.

Mary Jane Michaels, NCAMA President

GOVERNOR'S COORDINATING COUNCIL ON AGING

As previously described, the Council continues as the officially designated State agency for the implementation of the Older Americans Act. In this role, federal funds made available to the State are allocated by the Council in the form of grants to various agencies and organizations across the State to support their programs of providing various services (recreational, rehabilitative, counseling, referral, occupational, etc.) to the elderly citizens of our State.

As Society representative, I have regularly attended Council meetings and have participated in the deliberations. In my judgment, the Council is judicious in its stewardship and allocation of these funds, and is making every effort to stimulate measures over and beyond these grant programs at no cost in public funds to further study and solve problems of the aged.

Edgar T. Beddingfield, Jr., M.D.

COMMITTEE ON INTERAGENCY MEDICAL CLAIMS REVIEW

The Committee met at Pinehurst September 27, 1968 and discussed the mechanisms necessary for the function of an Interagency Medical Claims Review and some analysis made of the probable nature of the function of the Review Committee. The following report was made to the Executive Council:

The Committee on Interagency Medical Claims Review met on September 27, 1968, with all members present except one.

The duties and responsibilities with which the

Committee was charged were reviewed, and a list of objectives of the Committee was established.

There was considerable discussion of the problems that may confront this group, and ways and means of meeting and solving them.

It was RECOMMENDED that Col. Clifton Craig be appraised of the availability of the Committee.

It was ALSO RECOMMENDED that a letter be written to Governor Moore, for distribution to the proper agencies, informing him that the Interagency Claim Review Committee has been established by the Medical Society for review of pretests on the part of the vendor that such statement should be general in nature.

Since that meeting a letter by Dr. Welton to the Governor of North Carolina was forwarded notifying him of the existence of such a committee. The Chairman of the Committee communicated with the physician advisor of the Department of Vocational Rehabilitation who has been, for the time being, nominated as the speaker for all state agencies in regard to Claims Review. It was concluded that Welfare payments to physicians would come under this committee's review since the Blue-Cross-Blue Shield is acting as intermediary and the Blue Shield Committee would logically review any claims arising in this group. Based on the brochure of the Insurance Claim Review Service for North Carolina, a similar brochure is being prepared for use in regard to Interagency Claim Review Service, and it is believed that through the medical director of Vocational Rehabilitation the review service will become functional as cases arise requiring review.

Alfred T. Hamilton, M.D., Chairman

AD HOC COMMITTEE ON PODIATRY

Because of the delays in getting directions to the ad hoc Committee on Podiatry as to what they were to do, we will not be able to meet with the podiatrists by February 15th. We are in the process of trying to get a time and place for a meeting with the podiatrists now. We have requested direction from the Executive Council on more than one occasion but have never received any and have, therefore, been hesitant to proceed. As we feel that this is something that should be done, we will proceed "by the seat of our pants."

The following report of the meeting of the Committee in September is presented:

The agenda was discussed by Drs. Styron and Bigham. I was delayed and missed this discussion. The agenda was then gone through a second time by Dr. Bigham and me, and then by Dr. Styron and me. Dr. Goldner was unable to attend.

1. All felt that the present situation is quite frustrating because of the poor description of podiatry in our General Statutes. We felt that in order to have anything concrete done this would have to be better defined. At the present time under the General Statutes and with our present knowledge of podiatry as practiced in the state of North Carolina, it was not felt that there is any place for podiatry staff func-

- tion in general hospitals. This would not preclude podiatrists coming into the hospital to patients' rooms for help in the care of deformed toenails, etc.
2. The recent ruling by the Attorney General was discussed. It is felt that no action need be taken on this at this time. The opinion of the Attorney General was felt to be lacking in several respects. Apparently there was no in-depth study made at the time of this ruling.
 3. It is felt that a direct and official form of communication with the podiatrists need be established. Perhaps this can result in a more clear definition of podiatry and podiatric practice in the state. There are apparently two "schools" of podiatric practice in this state, one being much more aggressive surgically than the other. Perhaps the medical doctors and podiatrists cannot agree to a change in the General Statutes, but we feel that certainly such an effort should be made.
 4. It was felt that a "registry" for complaints about podiatric practice should be maintained. The Committee on podiatry should record these complaints to help them in their discussions and should turn these complaints over to the podiatrists and their Board for this help in alleviating a situation whenever possible.

Dr. Styron presented the essence of these recommendations to the Executive Council on Sunday, September 29th.

The Ad Hoc Committee on Podiatry has met and on the recommendation of the Executive Council of the North Carolina Medical Society has met with a representative group from the North Carolina Podiatry Society. The podiatrists and we do not believe that the wording in the definition of the present General Statute of podiatry is clear. The podiatrists particularly wish to have the word "deformity" deleted. We feel that it should not be left "carte blanche" for medical and surgical diseases of the foot and should have the proper limitations spelled out. We have told them that we (the Committee on Legislation) would review any suggested changes that they might have in the General Statute. It is this Committee's opinion that we should cooperate with them in this matter. If there are insurmountable differences of opinion as to what limitations, if any, should be imposed on the medical and surgical diseases of the foot the areas of differences will be discussed. The podiatrists, through their attorney, Mr. Broughton, will present such changes to the Legislative Committee of the Medical Society.

The problem of hospital privileges has been discussed with the podiatrists at some length. They state that they have been trained in hospitals. Their training as presented in their catalogues has been reviewed. It is our opinion that their operating room training is not nearly comparable to the minimum standards for medical practice. We do not feel that they should be given general operating room privileges to practice surgery in the State of North Carolina. The podiatrists are apparently making continued efforts to upgrade their training and to carry out their practice ethically and

conscientiously.

The podiatrists stated that they had, in the past, the impression that the physicians in the state did not wish to help them. Our meeting with the podiatrists was a pleasant one but not particularly fruitful beyond the fact that we both agreed that the present definition of podiatry in the Medical Practice Act is not good. The initiative as to better wording for the Medical Practice Act will be left to the podiatrists. It is the opinion of the Committee that the potential avenue for liaison with the podiatrists be left open. It is anticipated that functions of the Committee would be initiated by the Podiatrists and that the Medical Society's role be primarily advisory. It is felt that there will be occasions when we feel they are right and would wish to give them our support and probably occasions when we feel that their ideas are not right and we would wish to oppose them.

Thomas B. Dameron, Jr., M.D., Chairman

AD HOC COMMITTEE ON THE RELATIONSHIP OF THE MEDICAL SOCIETY TO NORTH CAROLINA BLUE CROSS-BLUE SHIELD

The Ad Hoc Committee on the Relationship of the Medical Society of the State of North Carolina to North Carolina Blue Cross-Blue Shield, appointed by President David G. Welton by direction of the 1968 House of Delegates, has held two meetings to date. At the first meeting September 26, 1968 in Mid Pines attention was given to the history of the voluntary health insurance movement in North Carolina, with particular reference to the founding and development of Hospital Care and Hospital Saving Associations in 1933 and 1935 respectively and their merger into the North Carolina Blue Cross-Blue Shield Association in 1968. The historic role of the Medical Society, the work of the Hart Committee in creating the "Doctor's Plan" and the Board structure of the merged organization were topics of discussion.

Mr. Alexander McMahon and Mr. Kenneth Beeston, representing management of North Carolina Blue Cross-Blue Shield attended this meeting to discuss Organizational Structure, the phasing out of the "Doctor's Plan" and proposed new certificates affording more comprehensive and better balanced coverage for subscribers and reflecting the interest of all practice groups.

Doctor Roy Bigham, Chairman of the Blue Shield Committee, Dr. Marvin Lymberis, member of the North Carolina Blue Cross-Blue Shield Board and Doctor Charles B. Wilkerson, Jr., member of the North Carolina Society of Internal Medicine were invited to the meeting to serve as resource persons covering appropriate areas under discussion. It was noted that the suspension of the "Doctor's Plan" will necessitate revision of the Medical Society By-Laws applying to the Blue Shield Committee. The Charter of North Carolina Blue Cross-Blue Shield provides for equal representation on its board of hospitals, physicians, and the public. The Board is presently constituted by eight members from each of these three categories. The President-

Elect of the Medical Society is Exofficio member of the Board which meets quarterly. Monthly meetings are held by the Executive Committee appointed from the Board.

At the second meeting of the committee January 24, 1969 during the Officer's Conference in Pinehurst, the Chairman of the Committee reported his attendance at an October Conference of the National Association of Blue Shield Plans which adopted an amendment to its membership standards requiring each member plan to develop and offer a paid in full program based on usual, customary and reasonable charges. Mr. McMahon and Mr. Beeston discussed for the committee the implications of the action of National Blue Shield. It was noted that membership in National Blue Shield is predicated upon endorsement of the plan by its respective State Medical Society.

The organization and board structure of other state plans was discussed. Plans in other states range from Blue Shield programs operated and controlled by a Medical Society to totally integrated Blue Cross-Blue Shield programs with broad representation on the board. In 1968 election of physician members to the North Carolina Blue Cross-Blue Shield to the Board was transferred from the General Session to the House of Delegates.

At its second meeting the committee decided to recommend no change in the basic board structure. A sub-committee was assigned the responsibility to study revision of the By-Law applying to the Blue Shield Committee to be presented to the Executive Council for referral to the Committee on Constitution and By-Laws.

As the study has progressed it has become apparent to the committee that lack of communication between the Blue Shield Committee, physician members of the Board of North Carolina Blue Cross-Blue Shield and membership of the society has been the basis for misunderstanding and dissatisfaction. The matter of improved communication will be an overriding consideration of the final report of the committee.

John S. Rhodes, M.D., Chairman

REPORT OF BOARD OF DIRECTORS NORTH CAROLINA BLUE CROSS— BLUE SHIELD, INC.

(Medical Society Member)

The year 1968 was a very active year for the North Carolina Blue Cross-Blue Shield. The consolidation of the two parent groups, Hospital Care Association and Hospital Saving in Chapel Hill, were merged successfully on January 2, 1968. The merger of the two organizations was affected with a minimum of difficulties, and the excellent cooperation of the antecedent corporations, their boards and management, has created what we feel to be a much stronger organization better equipped to serve the public of North Carolina.

The New Blue certificate, which has just been placed on the market, offers far more comprehensive cover-

age to subscribers than any certificate heretofore offered. The Physician Trustees were consulted at length regarding physician relationships and professional aspects of this new certificate. The Management has been most cooperative in carrying out the wishes of the composite Board and keeping the Board well informed of the rapidly developing changes in pre-paid hospital and medical care. All subscribers will have comprehensive coverage for outpatient services for accident injury, medical emergencies, diagnostic x-ray examination, and laboratory tests. This has been aptly described as covering the vertical as well as the horizontal patient. By thus removing any economic incentive for a patient to request admission for a service that can be feasibly and safely provided on an outpatient basis, the Corporation will be contributing to a reduction in the cost of health care and helping the hospitals utilize existing beds for patients who medically require inpatient facilities.

Surgical coverage will be based on the procedure code, nomenclature, and unit values of the North Carolina Relative Value Studies approved by the Medical Society and available at a range of conversion factors to suit the subscriber's ability to pay for coverage. Indemnity inpatient medical and surgical coverage will both be available on a variable cost basis and benefits will be paid as credits toward customary charges.

There is a strong trend in Blue Shield to provide professional benefits on the basis of usual, customary, and reasonable charges. Many sections of the New Blue certificate incorporate this concept. Benefits for outpatient accident care, medical emergencies, radiation therapy, diagnostic x-rays, laboratory tests, and extended benefits were developed on this basis. Inpatient medical and surgical coverage will also be available on the basis of usual, customary, and reasonable charges as required under new national Blue Shield standards. Medical and surgical coverage will be available at a range varying from 75 to 100 percent of charges.

The former "Doctors Program" coverage based on subscriber income limits will not be a part of the new certificate benefits and will be rapidly phased out and eliminated as subscribers are converted to the New Blue certificate.

At the end of 1968 Mr. Elisha Herndon and Mr. E. B. Crawford who had headed the antecedent organizations since their inception were both retired. Their services to health care in North Carolina were recognized by the Medical Society of North Carolina, by the North Carolina Hospital Association, and by many other groups. Both men have been made honorary members of the Board for life and will continue to advise and consult the North Carolina Blue Cross-Blue Shield.

The Physician Trustees wish to express their appreciation and congratulations to the Blue Shield Committee of the Medical Society. Under the chairmanship of Dr. Roy S. Bigham of Charlotte and the vice-chairmanship of Dr. Robert P. Crouch of Asheville, the Medical Society has had an effective and efficient task force which has served to help keep benefits and

schedules up-to-date and conducted a peer review function to resolve problems or specific claims when professional judgment was necessary to protect the interest of physicians, subscribers, or the Corporation.

The consolidation of the former Associations and the coverages of the new certificate require some corresponding changes in the Corporation's "Statement of Understanding" with the Medical Society and some change in the Society's Constitution and By-Laws governing functions of the Blue Shield Committee. The Medical Society ad hoc committee on relations with North Carolina Blue Cross and Blue Shield under the chairmanship of Dr. John S. Rhodes will make specific recommendations and your Physician Trustees stand ready to cooperate fully with Dr. Rhodes's committee and Dr. Bigham's committee.

We think it evident that voluntary prepayment must rapidly expand the scope of its coverage toward prepayment of total health care. The composite Board structure of North Carolina Blue Cross and Blue Shield, representing the public, hospitals, and physicians, lends itself well to this concept. The total Board relies on the advice of the Physician Trustees in matters related to professional services. This fact, taken with the professional duties delegated to the Blue Shield Committee, has in our opinion enabled your Trustee representatives to fully represent the interest of the profession and the public.

The Physician members of the Board of Trustees wish to express their appreciation to the other members of the Board, and to Management, for their great efforts to understand the problems relating to the physicians of North Carolina.

Marvin N. Lymberis, M.D.

H. Fleming Fuller, M.D.

Alfred T. Hamilton, M.D.

Paul McN. Deaton, M. D.

Frederick A. Blount, M.D.

J. Street Brewer, M.D.

Joseph B. Stevens, M.D.

Kenneth D. Weeks, M.D.

COMMITTEE ON DRUG ABUSE (ad hoc)

We first met at the headquarters office in Raleigh with a Committee Liaison of representatives from the Medical Society, Department of Public Welfare and the Pharmaceutical Association. An organizational meeting was held in Mid Pines defining the objectives of the Drug Abuse Committee which are as follows: (1) Education of our colleagues of the dangers involved in indiscriminate promiscuous prescribing of amphetamines, tranquilizers, barbiturates, etc. (2) To work constructively with the North Carolina Pharmaceutical Association, the SBI, the Narcotics Division of the Treasury Department, and the Department of Motor Vehicles of the State of North Carolina to abate drug abuse. (3) Support employment of needed staff for investigation of illegal drug activities relating to the SBI, the Narcotics Division of the Treasury Department, and the FBI. (4) To investigate the possibility that

an SBI agent be assigned to the State Medical Society to investigate any illegal drug activities or drug abuses that would normally be assigned to Grievance Committees. (5) The Committee should support and implement education of the public, particularly relating to high school and college students, of the dangers involved in using hallucinogenic, amphetamine or barbiturate drugs. (6) Have some concern about prescription labels relating to tranquilizers and barbiturates and suggest that such labels have printed at the bottom "Caution—affects driving ability."

A very successful meeting of the Drug Abuse Committee was held in Chapel Hill at the Institute of Pharmacy in conjunction with representatives from the Pharmaceutical Association, the SBI, and the State Highway Patrol. This was a two-day workshop on drug abuse. The North Carolina Pharmaceutical Board promised a thorough study and tentative approval to require labeling of certain drugs "Caution—affects driving ability." The Director of the State Bureau of Investigation gave approval to assigning SBI agents to assist any Medical Society Grievance Committee in notifying a medical colleague when a drug abuse problem occurs. The committee voted support of the proposal that the State Bureau of Investigation equip a van with drug abuse information to travel throughout the state. Local county medical societies are requested to support the State Bureau of Investigation Drug Abuse Van Project when visiting in their locality. The committee wishes to express their thanks to Mr. W. J. Smith, Executive Secretary of the Institute of Pharmacy.

H. W. Stevens, M.D., Chairman

DELEGATES TO AMA

AMA 1968 Clinical Meeting—See North Carolina Medical Journal, January 1969, Vol. 30, No. 1, page 27.

THE NORTH CAROLINA MEDICAL CARE COMMISSION

Summary of Activities

For the Calendar Year Ending December 31, 1968 Medical Facility Construction

North Carolina continues to have the distinction of being the foremost state in the country in the total number of medical facility projects constructed under the Hill-Burton Act and is second in the number of general hospital projects developed under the program.

It ranks seventh in the number of beds constructed and third in the number of public health centers developed with Federal aid. North Carolina now ranks thirteenth from the top among the states in the number of hospitals and fifteenth in the number of beds. Among the nine South Atlantic States, we rank second in number of hospitals and beds.

During the year, the Commission approved nine hospital projects that will provide 700 additional general beds to the State, 1 nursing home which will provide 50 beds, 4 mental health centers which will furnish 63 more

psychiatric beds in general hospitals, 1 facility for the mentally retarded and 1 public health center. The total cost of medical projects approved during the year amounted to approximately \$53 million, which represents a 112% increase in the dollar volume of projects over that approved in 1967. Currently, the medical facility construction activity in North Carolina under the auspices of the Medical Care Commission involves approximately \$152 million—the largest volume of contracts experienced at any single time in the history of our hospital building program.

Student Scholarships for Medical and Paramedical Studies

As a continuing means of trying to attract more young people into health careers to man our expanding health programs, the 1967 General Assembly greatly increased funds for this purpose. The number of students approved for educational loans in medicine, dentistry, pharmacy, nursing and related health studies increased 20% in 1968. There are now studying under this program 314 students. Over 100 rural communities have benefited by service from these recipients. While 21 medical recipients have completed 46 total years of service to the State's mental hospitals, 63 physicians have completed a total of 199 years of service to rural communities.

Hospital Licensing

In 1968 there were 162 hospitals in the State that were eligible to be considered for accreditation by the Joint Commission on Accreditation of Hospitals. Among this number, 110 were actually accredited representing 68% of all of the hospitals and 85% of eligible beds. Under Federal procedures, the Medical Care Commission is continuing to provide consultations to hospitals to enable them to retain certification to accept Medicare patients. Of all licensed hospitals, about 88% are participating in the Medicare program, representing 95% of the State's available beds.

COMMITTEE ON RADIATION

We who are concerned with radiation in our state are saddened by the loss of the former chairman of this committee, Dr. Robert J. Reeves.

Dr. W. L. Wilson of the State Board of Health is looking after the radiation protection of the physicians' and dentists' offices who have ionization equipment and/or isotopes.

Mr. William F. Henderson, Executive Secretary, Medical Care Commission, is doing his part in the hospitals coming under his jurisdiction.

Waldemar C. A. Sternbergh, M.D., Chairman

REPORT OF ASSISTANT TO EXECUTIVE DIRECTOR

This is the fourth annual report of my responsibilities and activities as Assistant to the Executive Director of the Medical Society of the State of North Carolina. As I have reported in the past, each additional year of work gives me with greater insight into the inter-workings of the Medical Society.

Again the past year has provided me the opportunity to attend the 62nd Association Public Affairs Conference sponsored by the U. S. Chamber of Commerce. This annual meeting held in Washington, D. C., made it possible for me to attend the Carolinas Society of Executive Directors' Congressional Dinner. This dinner, which is a highlight each year, provides an excellent opportunity to meet with the North Carolina Congressional Delegation.

Along this same line it was my responsibility to survey the "Congressional Record" for pertinent health legislation.

Shortly after attending the U. S. Chamber's Public Affairs Conference, I was able to attend with 24 other representatives from North Carolina, the National AMPAC Workshop held in Washington, D. C. Numerous selected physicians attended the workshop which shows the socio-economic interest of physicians in North Carolina.

As this report indicates, I have become more and more involved and concerned with health legislation and its implications. Although the N. C. General Assembly was not in session this year concern was given to the various Study Commissions that were meeting during this off-year.

A very important part of my responsibilities for the Medical Society was the staffing of committees of the Public Relations Commission. In attending the various committee meetings and other Medical Society related meetings, I have traveled over 4,000 miles throughout the state.

Again, as in the past, I have devoted spare time to functions of MEDPAC. This has been a growing function and the outlook at this time is one of greater growth.

For the past year Physician Placement has been an area of much concern. I have attempted and will continue to attempt to meet the corresponding needs of physicians and communities with a particular effort to satisfy the needs of the rural communities.

Bryant D. Paris, Jr.

COMMITTEE ON SCHOOL HEALTH

This Committee has directed its attention increasingly over the years to the Medical Aspects of Sports. It was the feeling of the Committee that its functions in School Health should be transferred to other appropriate Committees, and that our own Subcommittee on Sports Medicine be elevated to full Committee status. It was hoped that those who had been active in the work of the aforementioned subcommittee would be retained for the new and larger enterprise. Official action to these ends was requested.

Millard B. Bethel, M.D., Chairman

COMMITTEE ON OCCUPATIONAL HEALTH

There is growing concern about the large number of industrial accidents. Accidents are a major cause of loss of productivity in industry and of disability among workers. Many accidents are preventable. Programs to promote accident prevention and safety con-

sciousness should be increased. The management of the injured should emphasize rehabilitation and not merely compensation.

A new program has been initiated to assess the physical and emotional health of candidates and employees of the North Carolina Highway Patrol through pre-employment and periodic examinations. Internists in the state are conducting the examinations. Results are processed at the UNC School of Medicine and a rating is submitted to Highway Patrol officials concerning the overall fitness of the individual without revealing privileged information.

This program has resulted in the rejection, reassignment or retirement by the Patrol of some individuals for valid medical reasons. In other cases, defects which might have impaired performance have been identified and corrected. The program may be a prototype for the medical evaluation of state law enforcement and perhaps then personnel.

Donald D. Weir, M.D., Chairman

REPORT OF THE FIELD REPRESENTATIVE

Under the direction of the Executive Director, the Field Service capability was instituted on June 15, 1968. During the ten months since that time, I have traveled some 21,000 miles over this state, engaging in various field activities.

Initially, I was involved in assisting with arrangements and accompanying speakers, to Headquarters Facility discussion meetings around the state. I assisted in approximately 25 of these. Subsequently, I embarked on a routine method of calling on County Medical Society presidents and secretaries, after calling upon the Councilors of their respective districts first. Also, during these field trips, I attended a number of county medical society meetings. As of late, I am embarking on a program, at the direction of the Executive Directors, of calling upon State Committee Chairmen with approval and guidance of the respective Commissioners.

On the national scene, I've had the privilege of attending the AMA Annual Meeting in San Francisco, the Public Relations Conference in Chicago, and the Chamber of Commerce Public Affairs Conference in Washington, D. C.

Primarily, the past ten months has been a period of orientation. I have learned a great deal by doing. It has been my pleasure to meet a great portion of the State Society membership this past year, and I would like to say at this time that I stand ready to be of assistance in any manner you feel necessary, and encourage your use of the field service capability to the fullest.

Dan I. Mainer
Field Representative

ANNUAL REPORT

Education Consultant

This was the year which brought the release of the long awaited report of the Governor's Study Commission on the Public School System of North Carolina

which many of the Committees considered and took action regarding it. The report was in favor of more school health services and programs and came out strongly for preschool mental and physical examinations. Although the Committee on School Health was dissolved in October, other Medical Society Committees took the report under advise and made their recommendations to the Executive Council. A more detailed account of this can be found under Committee reports and Executive Council actions.

Under the continued and steadfast directions of the Executive Director, James T. Barnes, this writer has attended meetings of this and other organizations, assisted Committees in their activities, subject-related programs, and meetings and has been generally available for consultation and tasks assigned.

In outside related groups, the Education Consultant has continued to serve as secretary to the N. C. Council on Food and Nutrition, as board member to the N. C. Rural Safety Council and to represent Mr. Barnes at the meetings of the N. C. Mental Health Council and the N. C. Committee on Patient Care when he could not be present, because of conflicts.

The Youthpower Project of N. C. as of this year will be directed and operated by the N. C. Council on Food and Nutrition in lieu of the N. C. Farm Bureau which has sponsored it in other years. This is a contest in which high school students are judged on projects related to food, nutrition or food related careers. Winners attend the National Youth Power Conference in Chicago in March of each year. Dr. Charles Styron, the Medical Society representative to the Council, has urged strong support of the project.

In regards to the N. C. Rural Safety Council, the Medical Society had one of its members, Dr. D. A. McLaurin, of Garner recognized with an award for his activities in boating safety. The Council has been in the process of updating and clarifying its Constitution and By-Laws.

The N. C. Patient Care Committee finalized its report on Hospital Visitation and Dr. John McCain submitted a shortened version to the AMA Committee on Nursing for possible publication in the Journal of the American Medical Association. It has been a pleasure to be interested in and associated with this committee.

A number of conferences and meetings were in the planning stage this year including the Western Regional Rural Health Conference, Lake Junaluska and the Symposium, "Dialogue and Dilemma-Medicine and Religion", Chapel Hill. The symposium hopes to bring to N. C. some of the outstanding experts in physician-minister communications. The Conference on Rural Health will focus on child health programs and home health care programs.

Another first for this year and credit to several committees' interest, activity and persistence has been the announcement of the establishment of the Governor's Committee on Population and Family. Several of the Medical Society Committees continue their interest and observance of its activities.

The subcommittees of the Mental Health Committee have met in three sessions this year, rather than their

usual two, because of the legislative year and the increased interest of the chairmen and committee members has progressed. This contingent of Committees probably for its efforts for the year has at the top of the list of achievements the holding of the Conference on Planning of a Coordinated Approach for Continuing Education in Mental Health for the Practicing Physician in N. C. This was the meeting of the Subcommittee on Mental Health Education and invited consultants at Quail Roost Conference Center in Rougemont. A number of recommendations developed out of this conference and the Committee continues to work on their implementation.

The Mental Health and the Law Offender Statement was written and approved and work started on the Statement on the Role of the Physician in Suicide Prevention. The meeting in Chicago for mental health representatives was on the mental health of children and there was a preliminary report from the Joint

Commission on Mental Health of Children. The continuing education program held in conjunction with Cherry Hospital was held this year and it is hoped there will be a similar program at the other three hospitals.

In Nursing, there is a hope of the Legislature increasing the aid to diploma schools to \$1,000 per student. The Chronic Illness Committee met with the Duke Medical Center on Aging for a report on its development and growth.

It has been a continued pleasure to work with the new Commissioner on Public Service, the chairmen and committee members, fellow staff and office personnel, and others associated with throughout the year.

COMMITTEE ON AWARDS

(No report as of 4/15/69)

NORTH CAROLINA BOARD OF MEDICAL EXAMINERS STATISTICS

November 1, 1967-October 31, 1968

Total number applicants granted license	441	Part I and II	4
By written examination	191	Applicants rejected license by endorsement of credentials	1
By endorsement of credentials	250	Applicants declined permission to take written examination	0
Limited license	101	Hearings	
Hospital residents	63	Petition reinstate narcotic tax stamp	1
County or counties	35	Investigation State Bureau of Investigation	1
Special limited license	102	Meeting with Narcotic Agents—State and Federal	
Hospital residents	55	Narcotic addiction—Follow-up interview	5
Postgraduate foreign exchange		License revoked	
hospital residents	47	Alcohol and violation of narcotic laws	1
Staff—State institutions	3	Surrender—Narcotic stamp	
Written Examination Failure	7	violation of narcotic law	1
Part I	1	Recommend reinstatement of narcotic tax stamp	1
Part II	2	License to practice medicine voluntary	
		surrender drug addiction and alcohol	1

STATISTICAL REPORT OF HEADQUARTERS STAFF

1968-69

Processable mail received	25,654
Mail dispatched	94,693
Telephone communications (reported)	2,665
Telegraphed communications	475
Transmittals	362
Meetings attended (reported)	304
Personal Conferences (reported)	338
Review of Literature	2,469
Reports	496
Transactions disseminated (non Journal)	120
Educational distributions	1,596
Releases mailed (divers media)	5,153
Films distributed	16
Public Relations Bulletins	39,613
Exhibits (offered)	9

PUBLIC SERVICE COMMISSION

All committees of the Public Service Commission have met and undertaken activity during the year, with most of them having several sessions.

At the September Conclave, the School Health Committee recommended that it be dissolved, with its functions re-assigned within the Commission, and that its subcommittee on Medical Aspects of Sports be upgraded to full Committee status. With the concurrence of the Executive Council this has been accomplished.

Reports of the Committee are included in the Compilation of Reports. A number of recommendations have been forwarded to the Executive Council and House of Delegates for action.

The Committee on Mental Health remains intensely active under the guidance of Chairman John McCain. Current projects are too numerous to enumerate.

The Maternal Health Committee continues work on a therapeutic abortion survey, and a review of fetal and neo-natal deaths. These reports will be of interest and concern to us all.

I will not enumerate the other committees and their chairmen, for sake of brevity, but wish to commend them for their continued interest and activity.

D. A. McLaurin, M.D., Commissioner

Abridged Minutes of the Meetings of The Executive Council

SPECIAL CALLED MEETING OF THE EXECUTIVE COUNCIL

August 11, 1968

(Note: As recommended by the Finance Committee, the Executive Council authorized that just the salient actions of the Executive Council henceforth will be reported in briefed context. JTB.)

The Velvet Cloak Inn, Raleigh, North Carolina

The Executive Council met in a special called meeting August 11, 1968, 9:45 a.m., at The Velvet Cloak Inn, Raleigh, North Carolina.

The meeting was called to order by President David G. Welton and a quorum declared by Secretary Charles W. Styron.

President Welton made the following premising remarks:

The usual summer hiatus in the Society's activities has been cancelled this year—shall I say—by circumstances beyond my control. Consequently, a great deal of business has accumulated very rapidly, but this has been anticipated to some degree and when you realize the time between May 15th and September 29th, as our volume of business continues to increase, there's almost too much in that length of time to cover in a one day session probably.

So, even without the petition which we shall get to, it might well have been necessary to have a meeting.

There are some special guests here today because of the essential reason for calling this meeting. The President took it upon himself, his prerogative, to invite the members of the Planning Council, otherwise known as Blue Ribbon No. 2, which is made up of the ten past Presidents—Frank Jones, George Paschal, John Rhodes, John R. Kernodle, Amos Johnson, John Reece, Lenox Baker, Ed Schoenheit, Donald Koonce and Zack Owen.

We've also invited the members of the Building Committee, Headquarters Facility, of which Dr. Hewitt Rose is Chairman and this includes Beverly Armstrong, Lenox Baker, Jack Hughes, Frank Jones, John R. Kernodle, Donald Koonce, George Paschal, John Rhodes, William Romm and Wyan Washburn.

The other group that has been invited is the Finance Committee of which Dr. Benton is Chairman and includes Dr. Faison, Dr. Tilghman Herring and the consultants are the six Commissioners.

Other guests who have been invited today because of their past activities and interest in this particular project are Dr. Tom Thurston, Dr. Fleming Fuller and Dr. James Raper.

This is not to indicate that there weren't others who have participated and are vitally interested, but I want these people to feel free to participate in the discussions today and to make suggestions.

As to the ground rules for today's agenda, it is a limited agenda as all of you know and I trust each of you has a copy.

I would like everyone to be as brief and as concise in the first place as possible in the presentations and when discussing a presentation, the chair requests that

you limit your time to not over five minutes. The chair reserves the right to extend this in special circumstances, or if it seems appropriate to ask you to shorten it.

The petition received by your President from the Secretary of the Forsyth County Medical Society dated June 26, 1968—the petition was sent to me by Dr. Fred Pegg, Secretary-Treasurer of the Forsyth County Medical Society.

"Petition to the President of the Medical Society of the State of North Carolina to Call a Special Meeting of the House of Delegates to Reconsider Methods of Financing a Headquarters Facility."

1. WHEREAS, the House of Delegates of the Medical Society of North Carolina on May 14, 1968, in Pinehurst, N. C., approved an increase in dues for each member of \$60 per year for five years beginning in 1969 or an alternate option of a \$250 assessment payable in January, 1969, for financing the construction of a Headquarters Facility, and also approved that this additional dues or assessment would apply to all new members admitted after January, 1968, BUT

2. WHEREAS, no delegates had advance notice of this proposal prior to the morning of May 14, 1968 when it was first presented to the Executive Council, and

3. WHEREAS, alternate proposals were not presented in detail to the delegates, nor were any considered by a reference committee of the House of Delegates prior to the meeting, and

4. WHEREAS, delegates had no opportunity prior to a vote to consult with or ascertain the wishes of the members of the component societies which they represented, and

5. WHEREAS, members of the Forsyth County Medical Society on May 21, 1968, expressed serious objections to the above action of the House of Delegates, namely:

- (1) That its membership and delegates had no advance notice of the proposal to be presented;
- (2) That paying cash for capital financing of a headquarters facility in an inflationary economy is not a prudent financial move; and that financing with a mortgage would be better under the circumstances;
- (3) That assessing new members with low income and high capital expenses would be an unfair burden on them and would discourage young physicians from applying for membership;
- (4) That construction, maintenance and operation of a building are not proper functions of the Medical Society and would require additional personnel, equipment and expense for management of such a building;
- (5) That additional and appropriate space needed for the headquarters operations and adequately identifiable as the headquarters of the Society can be alternately obtained by using the presently owned property and other assets of the society in an arrangement whereby others would

build an appropriate building and rent space to the Society: and

6. WHEREAS, the Forsyth County Medical Society on May 21, 1968 by formal motion instructed its delegates to initiate a petition for a special meeting of the House of Delegates to consider alternate methods of financing a headquarters facility and to invite all other members of the House of Delegates to join in this petition, and

7. WHEREAS, the Forsyth County Medical Society has also moved that it shall meet again prior to and shall instruct its delegates how they shall vote on alternate proposals at any such special meeting of the House of Delegates, therefore be it

I. RESOLVED, that we, the undersigned delegates representing the Forsyth County Medical Society, together with other delegates whose signatures are appended hereto, all totaling forty or more delegates, and in accordance with Chapter II, Section 2 (page 10) of the By-Laws, do hereby petition the President of the Medical Society of the State of North Carolina to call a special meeting of the House of Delegates no later than December 1, 1968, for the purpose of reconsideration of the method of providing for and financing adequate space for a Headquarters Facility and consideration of any other matters specifically related thereto, and, be it further

II. RESOLVED, that we hereby request that prior to this meeting the Executive Council, the Finance Committee, the Headquarters Facility Committee, and such management consultants deemed appropriate by the Council give consideration to the objections raised in paragraph 5 of the preamble to these resolutions and to alternate proposals which would remove or ameliorate such objections, and be it further

III. RESOLVED, that we hereby request that specific alternate proposals, with detailed supporting data, including the proposed use of the currently owned property and other assets of the Society, be distributed well in advance of the meeting to the entire membership of the Society, to the end that the membership of each component Society shall have time to study the proposals and, at its option, to instruct its delegate(s) as to its wishes prior to the meeting."

Signatures of seventy (70) verified delegates appears on the petition.

President Welton read a letter of acknowledgment which he had sent to each petitioning delegate the purport of which indicated his intention to call a special meeting of the House of Delegates of the Society no later than December 1, 1968, and cited four essential decisions to be made by the Executive Council as follows:

No. 1: To set the date and the place for the called meeting of the House of Delegates.

Now we have two major things to consider in making this determination. First of all, we need as much time as possible to get information to the membership in the ways which have been mentioned, not only in our Journal and individual letters, but by sending personal representatives to as many counties as possible.

The Called meeting must be before December 1st.

Now, Mr. Barnes has informed me that it takes a

minimum of five weeks to get the central bills printed and distributed and those should be in the mail by December 20th at the latest—Is that what you said? (Affirmative response)

Dr. Edgar T. Beddingfield made a motion: That a called meeting of the House of Delegates of the Medical Society of the State of North Carolina be held on November 10, a Sunday, in the City of Raleigh. I would further move that the meeting include a tour of the present headquarters facility and the proposed building site.

The motion was seconded and carried without dissent.

The second decision the Council has faced is whether or not to open up this matter of the \$25 dues increase, whether it should be put on the agenda of this called meeting of the House, since from my reading of the petition it's not specifically called for.

That the projected meeting of November 10, 1968, meet for the purpose of reconsideration of the method of providing for and financing adequate space for a headquarters facility and consideration of any other matters specifically related thereto.

The motion was seconded and carried without dissent.

The other two decisions which I believe are in order for this group here today are, how best to inform the membership during September and October and giving the headquarters committee authorization to sign a contract with an architect and get preliminary plans.

On motion of Secretary Charles W. Styron, duly seconded, the Executive Council voted unanimously to select Milton Small as the Architect for the Headquarters building on conditions that contract execution be delayed pending action of the House of Delegates in special session as to financing the building.

Following a detailed report of the Society Planning Council (Blue Ribbon No. 2) and widely participated discussions of reports of the Finance Committee, the Committee on Headquarters Facility, and the general counsel of the Society a consensus expression by President Welton was made as follows:

That a notice be sent out from our headquarters office to the president and secretary of each county society advising them that the date, place and time has been set for the called meeting of the House of Delegates and that they devote at least part of their regular meetings to a discussion of this matter and we will attempt to furnish authoritative speakers, representing the Executive Council of this Society to these meetings.

This can go in the form of a letter. It can also be repeated in the September issue of the P. R. Bulletin and the September and October issue of the Journal.

Dr. Louis Shaffner made the following motion:

I still see this as part of a consultative thing in order to get information to the membership and, therefore, an architect's help in dealing with the information in a package, I think, is important and I would move that the headquarters facility committee be authorized to consult with the architect to that extent and not exceeding \$1000 for sketches or renderings.

The motion was seconded and carried with one dissenting vote recorded.

(The Executive Council recessed for lunch at 12:15 p.m.).

Afternoon Session

The Executive Council reconvened at 2:05 p.m. with a quorum present.

On motion duly seconded, the resignation of John R. Kernodle, M.D., as a Society Delegate to the AMA House of Delegates, was received and accepted unanimously.

On nomination of Robert A. Ross, M.D., the name of Frank W. Jones was presented to the Executive Council as succeeding Delegate from the Society to the AMA House of Delegates for the unexpired term of Dr. Kernodle. Dr. Frank W. Jones was unanimously elected as Delegate to the AMA House of Delegates.

On nomination of Charles Stuckey, M.D., the name of David G. Welton was presented to the Executive Council as succeeding Alternate Delegate to AMA House of Delegates replacing Dr. Frank W. Jones' unexpired term as alternate Delegate. Dr. David G. Welton was unanimously elected as Alternate Delegate to the AMA House of Delegates.

The Executive Council received a resolution from the Society's Insurance Industry Committee as follows:

The physician members of the Insurance Industry Committee request that Commissioner Cutchin present to the Executive Council of the Medical Society of the State of North Carolina the sense of this Committee that official cognizance of the Medical Society of the State of North Carolina on this matter should be communicated to the Part "B" carrier with the request that the Part "B" carrier take such steps and action as they deem appropriate and expedient in contacting the proper officials of the Social Security Administration so that the definition of "nearest appropriate facility" may be reviewed.

Motion was made, seconded and carried to endorse the resolution of the Insurance Industry Committee.

On motion of Donald B. Koonce, M.D., duly seconded and carried, the Committee on Constitution and By-Laws was directed by the Executive Council to consider a proposal for Society By-Laws revision establishing an order of service succession of Alternate Delegates during meetings of the AMA House of Delegates in respect to the absences of the regular delegate during such meetings.

On motion made, seconded and carried, Dr. Jacob Koomen was invited to make a statement about the current status of the non-physician county health director. Dr. Koomen presented a statement which was received as information and President Welton agreed to refer the matter to an appropriate committee of the Society.

The Executive Council adjourned at 2:47 p.m.

Respectfully submitted,
James T. Barnes, Executive Director

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA REPORT OF THE EXECUTIVE COUNCIL 1968-69

Executive Council Meeting

September 29, 1968

(Morning Session)

The Executive Council met in regular fall meeting at Mid Pines Club, Southern Pines, 9:00 o'clock a.m., September 29, 1968. All members answered the roll and a quorum was present. President David G. Welton, presided.

Dr. Thomas C. Worth, newly-elected qualified Sixth District Councilor was recognized.

Distributed minutes of the May 11, 1968, meeting were approved. Minutes of the August 11, 1968, meeting as distributed were approved.

The Annual Report of the Woman's Auxiliary was presented, projecting authorized activities for the year, by Mrs. Edgar T. Beddingfield for and in the absence of Mrs. John L. McCain, President of the Auxiliary.

The following Annual Budget for 1969 was presented and recommended by Dr. Wayne J. Benton for the Finance Committee:

(See budget beginning next page)

On motion made, duly seconded and unanimously carried, the 1969 Budget (above) was adopted.

PRESIDENT-ELECT EDGAR T. BEDDINGFIELD: I move that the Executive Council adopt a plan of operation in transmitting its actions to the House of Delegates and to the membership wherein the reports would no longer be in the present format of a proceedings with identification of who said what, but that it be in a series of **summary reports** for transmittal to the House of Delegates and the membership; that a verbatim transcript of every meeting; and that every member of the Executive Council shall be given a copy of the verbatim transcription, and to any member upon request. The motion was seconded by Dr. Paul Deaton and carried without dissent.

The Executive Director was voted the discretionary authority to sell advertising in the Annual Program for 1969.

Reimbursement for travel and personal expenses of members of the Legislative Committee was, on motion duly seconded and carried, established in the Budget authorized by the Executive Council.

The Council received divers informational recommendations to a proposed anatomical gift act; opposition to osteomendations from the Legislative Committee related paths seeking to amend the Medical Practice Act; opposition to chiropractic, proposals to amend the voluntary health insurance act; and the implementation of Title XIX of the Federal Social Security Act. Specific legislative action was taken by the Executive Council as follows: To approve the four recommendations of the Committee on Legislation. The vote was unanimous.

Reading resumes on page 69

**MEDICAL SOCIETY OF THE
STATE OF NORTH CAROLINA**

BUDGET ESTIMATES

January 1, 1969 to December 31, 1969

RECEIPTS: (Estimated)		385,015
Estimated balance January 1, 1969	Nil	
Assessment 3300 paying members*	313,500	
Sales (estimated on 1968)	3,000	
Author Contributions to Cuts	200	
Revenue Unexpected (estimated)	900	
Technical Exhibits (estimated)	16,000	
Journal Net Advertisement (estimated Local on 1968)	9,000	
Journal Net Advertisement (estimated National on 1968)	40,000	
**AMA Remittance 1% of dues processed (estimated on 1968)	2,165	
MEDPAC Remittance 1% of dues processed (estimated on 1968)	250	
EXPENDITURES: (Estimated)		384,312
Schedule A	180,592	
Schedule B	77,128	
Schedule C	31,685	
Schedule D	14,475	
Schedule E	17,100	
Schedule F	21,592	
Schedule G	41,740	
EXCESS OF RECEIPTS OVER EXPENDITURES		703
EXCESS OF EXPENDITURES OVER RECEIPTS		
RESERVES: (Costs, \$26,104.55—Land)		
SUBMITTED TO COMMITTEE ON FINANCE	September 8, 1968	
SUBMITTED TO EXECUTIVE COUNCIL FOR APPROVAL	September 29, 1968	
SUBMITTED TO HOUSE OF DELEGATES FOR APPROVAL	May 18, 1969	

*Based on Dues @ \$95 per member per annum

**To be appropriated to Secretarial Budget A-6

A. EXECUTIVE BUDGET		180,592
A-1 President, expense of (travel and communications)	6,000	
A-2 Presidents Secretarial Assistance	5,000	
A-3 Secretary, travel of	1,000	
A-4 Executive Director-Treasurer salary of	22,000	
A-5 Executive Director-Treasurer travel of*	5,000	
A-6 Executive Office, Secretarial and Clerical Assistants**	36,331	
A-7 Executive Office, equipment for and/or replacements	1,500	
A-8 Executive Office, expense of (12 months rent, communications, printing, and supplies, repairs and replacements of expendables)	16,500	
A-9 Bonding (in effect to 1969)	914	
A-10 Audit (Quarterly & Annual)	1,150	
A-11 Taxes (salary tax) ..	4,000	
A-12 Insurance fire, compensation and employer's liability	600	
A-13 Membership Record System (addition to)	6,865	
A-14 Publications, reports and executive aids	200	
A-15 Insurable: interest insurance and retirement plans	5,295	
A-16 Assistant Executive Director salary of	16,500	
A-17 Assistant & Education Consultant, salary of	7,042	
A-18 Assistant Executive Director, travel of	3,000	
A-19 Assistant & Education Consultant, travel of	2,500	

MINUTES OF THE EXECUTIVE COUNCIL

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A-20 Assistant to Executive Director, salary of	8,000
A-21 Assistant to Executive Director, travel of	2,000
A-22 Executive Accountant, salary of	11,000
A-23 Field Representative, salary of	13,195
A-24 Field Representative, travel of	5,000

*Basis: Real for personal maintenance and travel @ 10c per mile and/or common carrier rate and for official purposes.

**Any revenue derived from collection efforts related to American Medical Association dues and processing of same shall accrue to this item of the Budget.

B. JOURNAL BUDGET 77,128

B-1 Journal, publication	43,000
B-2 Journal, cuts for	800
B-3 Editor, salary of	2,500
B-4 Assistant Editor, salary of	5,618
B-5 Editorial Office, expense of (12 months rent, communications printing and supplies, repairs and replacements)	450
B-6 Journal Business Managers Office expense of (12 months communications, printing and supplies, repairs and replacements)	750
B-7 Business Manager's Office equipment for	100
B-8 Journal, travel for (Local and National)	200
B-9 Taxes (salary tax)	950
B-10 Sales tax on Journal subscriptions and Roster sales	1,300
B-11 Roster, publication	6,500
B-12 Executive Council Reports, Transactions, Annual Reports, printing of	10,000
B-13 Advertising Secretary, salary of	4,960

C. INTRA-FUNCTIONAL ACTIVITY BUDGET 31,685

C-1 Executive Council expense of and travel of Councilors including district travel	6,000
C-3 Legislative Committee, expense of (Local and National activity)	6,500
C-4 Maternal Health Committee, expense of (secretarial, Communications, printing and supplies)	4,000
C-6 Committee on Arrangements	100
C-7 Scientific Exhibits Committee and Audio-Visual Program, expense of	675
C-8 Committee on Mental Health	650
C-9 Committee on Mediation	200
C-10 Committee on Chronic Illness	2,000
C-11 Committees in general, expense of	3,000
C-13 Committee on Occupational Health	200
C-14 Committee on Professional Insurance	175
C-16 Committee on Negotiations	200
C-17 Committee on Student AMA (Section & Transportation & Delegate to SAMA one each Medical School Chapter (3)	1,800
C-18 Committee on Disaster Medical Care	400
C-19 Committee on Industrial Commission	250
C-20 Committee on Constitution and By-Laws	C-11
C-21 Committee on Medical-Legal	100
C-22 Committee Advisory to N. C. Department of Motor Vehicles	400
C-24 Committee on Anesthesia Study	400
C-26 Committee on Blue Shield	500
C-27 Committee on School Health	400
C-28 Committee Advisory to N. C. Department of Public Welfare	100
C-30 Committee on Liaison to Insurance Industry	500
C-31 Rural Health Function (stationary) \$200; sponsorship of 4-H Health activity for one trip to National 4-H Club for State Health Winner, \$600; & Dues Rural Health Safety Council, \$100; Rural Health Conference \$200)	800
C-34 Committee on Scientific Works	Nil

C-35 Committee on Headquarters Facilities	500
C-36 Committee on Family and Marriage Counselling	500
C-37 Committee on Medicine and Religion	150
C-38 Committee on AMA-ERF	100
C-39 Ad Hoc Committee on Task Force XIX	100
C-40 Committee on Scientific Awards	100
C-41 Committee on Physical and Vocational Rehabilitation	175
C-42 Committee on Eye Care & Eye Bank	110
C-44 Blue Ribbon Committee No. 1	100
C-45 Blue Ribbon Committee No. 2—Long Range	100
C-46 Committee on Finance	300
C-47 Utilization Committee	100

D. EXTRA FUNCTIONAL ACTIVITIES BUDGET

14,475

D-1 Delegates to AMA, expense of (8-including Alternates to each Annual and Clinical Session)	6,675
D-2 Conference Dues	200
D-3 Woman's Auxiliary (contribution to entertainment, travel to National Auxiliary for 2 and productions	4,000
D-4 Medical History Allocation authorized by Executive Council	3,600

E. PUBLIC RELATIONS BUDGET

17,100

E-3 Committee Chairman, out of State travel	500
E-5 Public Relations Equipment for,	1,250
E-6 Public Relations Office, expense of (12 months rent, communications, printing and supplies, repairs and replacements)	6,000
E-8 Publications and Executive Aids	100
E-9 Audio-Visual depiction; photography, radio-motion pictures, production, distribution and printing, purchase of films, etc.	1,600
E-10 Educational distribution; reprints, periodicals, press materials, pamphlets and dodgers for educational purposes; production, distribution and printing, binding, stuffing and mailing	800
E-11 News and press releases, production and printing of	400
E-12 Public Relations Bulletin, production and printing of	3,500
E-13 State High School Science Fair Program, expense of	200
E-14 Exhibits and Displays: Purchase, rental, production, fabrication and transportation of	650
E-15 Annual Officers Conference	1,000
E-16 Physicians Press Award	Nil
E-17 Public and personified activities in the field of Public Relations ..	600
E-18 Collateral Public Relations with other committee activities ..	500

F. ANNUAL SESSIONS (115th) CONVENTION BUDGET

21,592

F-1 Programs, Production of	1,800
F-2 Hotel and Auditorium expense	4,000
F-3 Publicity promotion, expense of (reporters and expense)	500
F-4 Entertainment (general involving personnel)	900
F-5 Orchestra and floor entertainment	2,500
F-6 Guest Speakers (5) expense of and/or for honorarium for	1,000
F-7 Banquet Speaker, fee and expense	750
F-8 Electric Amplification, operators, installations and screening auditorium ..	125
F-9 Booth installations, supplies, expense, signs, (Scientific and Technical) including exhibit expense & Promotion	5,000
F-10 Projection, expense of (service rentals)	1,000
F-11 Badges (members, guest, exhibitors, auxiliary)	200
F-12 Reporting Service for Transactions (sessions & sections 13)	2,200
F-13 Rental, extra facilities, trucks for sections and/or exhibits	177

F-14 Exhibitors entertainment (at 5% of Exhibit Income)	700
F-15 Banquet expense and places for members remitted	500
F-16 Police Security	240

G. MISCELLANEOUS BUDGET 41,740

G-1 Legal Counsel, retainer fees for	9,000
G-2 Reporting (Executive Council, etc.)	2,500
G-3 Fifty Year Club Pins and Certificates, and President's Jewel	250
G-4 Contingency and Emergency	12,500
G-5 Retirement System for Society Employees	9,700
G-6 Advalorem Taxes	1,915
G-7 Association of Professions	200
G-9 AAMC (Association of American Medical Colleges)	225
G-10 Commissioners, expense of	1,200
G-11 Executive Committee, expense of	500
G-12 Officers, expense	3,000
G-13 Travel and Maintenance, expense of essential Headquarters Staff for out-of-state sessions and conferences	750

The Executive Council agreed to the publication of examination dates scheduled by the North Carolina Board of Medical Examiners.

The Executive Council agreed to the schedule of Fall Committee Conclave at Mid Pines Club and the Officers Conference at Pinehurst for the year 1971 and instructed headquarters staff to implement these arrangements.

The Executive Council received a report from Commissioner Cutchin of a field study of Mr. Dan Mainer relative to emergency delivery of blood to hospitals by the State Highway Patrol with the recommendation: (a) use of a "certificate of emergency" form to be carried by the highway patrolman and presented for attending physician's signature a destination point. (b) place the responsibility with the physician regarding the actual phoning of the highway patrol direct and making the emergency blood relay request. On motion made, seconded and carried these recommendations were made policy of the Society.

The following member nominations to vacancies on AMA Councils and Committees were, upon vote, approved:

Council on Legislative Activities: Edgar T. Beddingfield, Jr., M.D., Stantonsburg

Committee on Medicine & Religion: W. Wyan Washburn, M.D., Boiling Springs

Committee on Medico-Legal Problems: Julius A. Howell, M.D., Winston-Salem

Committee on Disaster Medical Care: George A. Watson, M.D., Durham

Committee on Nursing: Frederick C. Hubbard, M.D., N. Wilkesboro

Committee on Medical Aspects of Sports: James R. Dineen, M.D., Wilmington

Council on Food and Nutrition: Charles W. Styron, M.D., Raleigh

AMA Disability Claims Review Committee: Frank W. Styron, M.D., Raleigh

AMA Disability Claims Review Committee: Frank W. Jones, M.D., Newton

Drug Utilization Panels of the Council on Drugs: Jay M. Arena, M.D., Durham

On motion seconded and carried, the Executive Council authorized representatives of the Society to urge the Legislative Research Study Commission to consider a per student per year subsidy to help prevent the closing of any medical school in the State of North Carolina.

Sunday Afternoon Session

The Executive Council voted to authorize the Committee on Legislation to seek an amendment to the North Carolina General Statutes G.S.-24-8 to delete the words "organized for pecuniary gain"; so that eleemosynary corporations will not be excluded from borrowing money at more than six percent interest.

The Executive Council voted to implement a suggestion that individual physicians be alerted when approached by a government group requesting fee for service for a health program to be financed by the government. It is suggested that this be taken up by the county medical society before making any such contract and if further assistance is required, then request that form the State Medical Society.

The following resolution was, on motion made, seconded and carried:

RESOLVED, that the Medical Society of the State of North Carolina go on record as favoring the establishment of an American Board of Family Practice without further delay.

Be it also, RESOLVED, that the medical educational institutions in North Carolina be requested to look forward to the establishment of a curriculum especially designed for family physicians.

Further be it,

RESOLVED, that this resolution be presented to the American Medical Association by the Medical Society of the State of North Carolina for consideration and action by the American Medical Association and further, be it,

RESOLVED, that copies of this resolution be sent to each State Medical Society, members of the Council on Medical Education of the American Medical Association.

tion and Trustees of the American Medical Association, The American Academy of General Practice and the North Carolina Academy of General Practice.

Commissioner Cutchin presented the following recommendations from the Committee on Blue Shield involving a matter on Medicare (Title XVIII):

1) That the matter involves payments, involves benefits payable to a certificate holder of the Association, no variation from present procedures arises.

2) If the matter involves the Association as carrier of Part "A" the committee feels it has the authority to advise the Association as requested, but recognizes that in so doing, it acts primarily as a utilization committee.

In such matters, the committee has advised the Association would not be confined to the usual line of communication to the Executive Council and the House of Delegates, but would be subject to review by the usual HEW channels supervising Part "A" and the carriers thereof.

3) If the matter involves both the function of the Association as an insurer and its role as carrier of Part "A", the committee will act in each area of interest as seems appropriate.

On motion made, seconded and carried, the recommendations were approved.

In a report by the Committee on Hospital and Professional Relations a series of educational conferences, proposed by the North Carolina Hospital Association for discussion of problems of mutual concern for hospital administrators, hospital boards of trustees and physicians, was endorsed by vote of the Executive Council.

The Executive Council voted to approve recommendations of the Committee to Work with the North Carolina Industrial Commission urging the principle of usual, customary and reasonable charges for hospital and physicians services in Workmen's Compensation cases.

The Executive Council, on motion made, seconded and carried, recommended that a member of the Committee Advisory to the Department of Public Welfare attend each meeting of the State Board of Public Welfare.

Commissioner Cutchin reported a working model of principles that the State Medical Society should seek to have embodied in a Social Security Title XIX Plan in North Carolina as follows:

I. The following health care services should be provided:

- 1) Hospital Inpatient Care
- 2) Hospital Outpatient Care
- 3) Physicians Services
- 4) Diagnostic Services rendered outside of hospital
- 5) Nursing Home Services for individuals 21 years of age and over
- 6) Prescription Drugs
- 7) Consideration regarding a dental program

II. Duration of benefits:

The above services should be of unlimited duration dependent only on the medical needs of the patient, but encompassing a plan for critical utilization con-

trols by the purveyors (peer groups) at pre-determined levels.

III. Eligibility level not be any lower than the presently effective level of eligibility for indigent and medically indigent and request that the State be encouraged to investigate the financial possibilities of raising the eligibility level for medical indigency.

IV. By consensus, the existing policy of the State Medical Society to favor the State Board of Health as the administrative agency for Title XIX was reaffirmed and it was further recommended that the Society, at this time, favor the use of a fiscal intermediary arrangement and further suggests consideration of the possibility of an underwritten insured plan.

On motion made, seconded and carried, the recommendations were approved.

From a report of the Committee on Utilization the following recommendation was presented to the Executive Council:

The Committee recommends that a series of six regional meetings be held in the State to discuss utilization review. Such meetings to be co-sponsored with the North Carolina Hospital Association and in cooperation with the State Board of Health, the North Carolina Nursing Home Association, and North Carolina Blue Cross Blue Shield as fiscal intermediary.

On motion made, seconded and carried, the recommendation was approved.

The Executive Council, on motion made and seconded, voted to direct the Task Force on Title XIX to consider a provision in the proposed plan providing for direct billing by physicians under Title XIX.

Recommendations from the Committee on Arrangements and the Committee on Scientific Works were presented by Secretary Charles W. Styron to have Sections schedule their meetings at 9:00 a.m. on Monday and Tuesday of the Annual Sessions and to have General Sessions scheduled to meet at 11:30 a.m. on Monday and Tuesday and at 9:00 a.m. on Wednesday of the Annual Sessions. Reference Committees of the House of Delegates to meet Monday afternoon of the Annual Sessions. The Executive Council voted to implement these recommendations in 1969.

The Executive Council by vote endorsed the North Carolina Interagency Medical Claims Review Committee requested by representatives of the Department of Administration of the State Government as previously appointed by President Robert A. Ross.

The Committee on Cancer recommended the mechanism for the gradual phasing out of papanicolaou smears should be worked out by the State Board of Health and the North Carolina Society of Pathologists. On motion, made, seconded and carried the recommendation was approved by the Executive Council.

The Committee of Physicians on Nursing made the following recommendations to Council:

1) That the Committee of Physicians on Nursing recommends that the Council endorse the three recommendations of the Diploma Schools made at Southern Pines on September 24th by the Diploma Schools represented there. They are as follows:

- a) that the cost of nursing education exceeds the cost per student by more than \$1,000 and that this cost is a serious obstacle in continued education of nurses in North Carolina.
- b) that the North Carolina General Assembly be requested to increase the financial support for nursing education in this state by raising the allowance to the Diploma Nursing Schools from \$100 per student to \$1000 per student.
- c) that the North Carolina Medical Society and the North Carolina Hospital Association be requested to support vigorously this request for appropriations, not only by appropriate resolutions, but also by special delegations to the General Assembly and by individual approaches to the legislators and candidates for election.

Explanations should be made to them regarding the great need for nurses and the invaluable service being rendered by these nursing schools in North Carolina in providing nurse education.

On motion made, seconded and carried the recommendation was approved by the Executive Council, and the Executive Council reaffirmed this statement of support of the Diploma Schools of Nursing in North Carolina.

The Executive Council by vote endorsed the concept of a Nurse Recognition Day and directed the Public Relations Committee to implement this concept of recognition of nurses.

The Executive Council received a report of recommendations from the N. C. Committee on Patient Care (on which the Society has representation) as follows:

- 1) That the North Carolina Committee on Patient Care endorse the improvement of hospital visitation practices in North Carolina hospitals.
- 2) that a statewide program be recommended for improved visitation practices in all North Carolina hospitals. The methods used in the pilot counties may well be used as guidelines for such a statewide program.
- 3) that such a program include a coordinated statewide educational effort aimed at familiarizing the general public with the desirability of improved hospital visitation practices and the benefits accruing to improved patient care.

4) that because the real value of a statewide program would be contingent upon uniformity, hospitals be encouraged to adopt similar visiting regulations and control methods insofar as is possible.

5) that the organization of local hospital visitation committees composed of representatives of the public, medical, nursing, and administration be encouraged to accomplish these goals in each hospital.

By vote of the Executive Council the report was accepted.

Commissioner Wayne J. Benton reported that the Medical Society Retirement Saving Plan now has 245 members with (an aggregate) investment of \$716,000. On vote of the Executive Council this report was accepted.

On request of the Committee on Chronic Illness the Executive Council by vote, reaffirmed its support of

an Audio-Visual education program being developed at Duke Medical Center by C. E. Buckeley, M.D.

The Committee on Maternal Health requested permission to conduct a survey on therapeutic abortions. The objectives of the survey will be:

- 1) To gather information which would help the practicing physician interpret the abortion law in conducting his day to day practice.
- 2) To gather information which might demonstrate the effect of the modernized abortion law on the practice of medicine as it relates to abortion.
- 3) To enable the establishment of a plan for a continued gathering of data on abortion for future study. This may relate to the needs for future changes in the law and secondly, demonstrate a desirability of the devising of a uniformly required "Certificate of Abortion" to be filed with the Bureau of Vital Statistics.

With these objectives in mind, the following resolution was made by Dr. Hugh McAllister and second by Dr. William Easterling:

That the Committee on Maternal Health of the Medical Society of the State of North Carolina institute a survey soliciting the cooperation of the hospitals in North Carolina to gather data on the therapeutic abortions which have occurred since the ratification of the modified abortion law and kindred offenses.

The Executive Council voted to approve the request.

On motion made, seconded and carried, the Executive Council expressed disapproval of a proposed uniform medical record form (so-called Sharpe form) for use of physicians making examinations for camp applicants and school athlete applicants for physical examinations by physicians.

By vote of the Executive Council the AMA-recommended form for college student service physical examinations by physicians was approved.

A recommendation by the Committee on School Health, to wit:

- 1) That the functions of the Committee pertaining to school health programs and coordinated with the Department of Public Instruction and the State Board of Health be transferred to either the Child Health or Community Health Committee.
- 2) That the functions of the Committee dealing with sex education in the public schools be transferred to the Family and Marriage Counseling Committee.
- 3) That the School Health Committee as such be dissolved and replaced by the present subcommittee on Medical Aspects of Sports; give the subcommittee full committee status and opportunity to devote its full attention to this increasingly important field.

The function of this new committee should be broadly construed to include pertinent aspects of physical education in the school systems as these apply to the preventive portions of the medical aspects of sports program. Inherent in this recommendation is the nomination of the existing subcommittee personnel for assignment to the Committee.

By vote of the Executive Council this was approved. Commissioner McLaurin recommended that there

be prepared a letter to all county presidents and secretaries, chiefs of staffs of hospitals and related personnel, which letter would outline all programs currently available through all the committees in the Medical Society of the State of North Carolina; such as Marriage Counselling, School Health, Medicine and Religion and the like. Bring them all and put them on one piece of paper and often enough to jog the memory of chairmen that this resource is available to put them in.

This recommendation, by vote of the Executive Council, was directed to the Committee on Public Relations for implementation if feasible.

By vote of the Executive Council, Dr. Jack Hughes of Durham was elected Vice Councilor for the Sixth Medical District for the interim term extending to the Annual Meeting of the House of Delegates.

The Executive Council adjourned at 6:27 p.m.

Respectfully submitted,

James T. Barnes, Executive Director

EXECUTIVE COUNCIL MEETING

Sunday Morning Session

January 26, 1969

The Mid-Winter Meeting of the Executive Council of the Medical Society of the State of North Carolina, held at The Carolina, Pinehurst, North Carolina, convened in the South Room at nine-five o'clock. Dr. David G. Welton, President of the Society, presiding.

A quorum was declared.

The Committee on Finance reported upon the 1968 Annual Statement of Operations and Auditor's report indicating a net deficit in operation of \$1128 instead of the anticipated deficit scheduled in 1968 Budget of \$19,000, based on the approved budget estimate of September 1967. A motion was made, seconded and carried, to accept the report.

Dr. Hubert McN. Poteat, Jr., Chairman of the Committee on Legislation presented and discussed the following resolution from the Wake County Medical Society:

NOW, THEREFORE, BE IT RESOLVED, that Wake County Medical Society endorses that the Medical Examiner Act of North Carolina be amended that the Medical Examiner shall be designated as the physician to make examinations of alleged rape victims and to testify in subsequent judicial proceedings, if called upon.

Mr. President, the Legislative Committee recommends no action on this resolution, for the reason that there are simply not enough Medical Examiners in the State to do this type of work, and it's unfeasible at this time.

On motion made, seconded and carried, the Executive Council approved the recommendation of the Legislative Committee.

The Executive Council received an additional report from Dr. Poteat in reference to five recommendations from the Committee Advisory to the N. C. Department of Motor Vehicles, to wit:

First, the implied consent law indicates that a person who accept a driver's license in North Carolina

at that time implies his willingness to have a blood alcohol or a breathalyzer test done if in the opinion of the law enforcement officer it's necessary.

Second, define drinking and driving in terms of alcohol content in the blood by enacting legislation making it unlawful for any person to operate a motor vehicle with a concentration of more than 0.1 per cent in his blood. This is wanted by the Highway Patrol, along with the implied consent law, because it would circumvent court trial and automatically take the license at once, if a breathalyzer shows the 0.1 per cent reading.

Third, impoundment of a car whenever a driver has had his license revoked or suspended, unless the car is stolen.

Fourth, mandatory blood alcohol on all drivers and pedestrians dying within four hours of a motor vehicle accident. Recommended that it be administered through the Medical Examiner's office and required of all morticians before embalming or cremation or before the body leave the State.

Fifth, permission legislation to permit voluntary reporting to the Driver Licensing Division by a physician of a patient who in the physician's opinion had a medical or mental condition incompatible with safe driving, unless the patient voluntarily surrenders his license. This would prevent a lawsuit against the physician by the patient when the physician acted in good faith. We have a similar law in the "Good Samaritan" law.

On motion, made, seconded and carried, the Executive Council voted to defer action on the third recommendation and endorsed the other four recommendations.

The following motion, duly seconded, was made by Dr. Edgar T. Beddingfield:

That it be the policy of the Medical Society of the State of North Carolina to recommend to the State Board of Medical Examiners that graduates of accredited colleges of osteopathy be admitted to the examination to practice medicine in this state, at the discretion of the Board.

The motion was adopted.

The following motion, duly seconded, was made by Dr. Beddingfield:

That the Legislative Committee be informed that it remains the policy of the Medical Society not to change the Medical Practice Act, insofar as the composition of the Board is concerned.

The motion was adopted.

Dean Isaac Taylor of the UNC School of Medicine, presented a discussion of legislative requests for medical education capital improvements at the University which was discussed at length. The following motion was made, seconded and voted favorable unanimously:

That the Council of the Medical Society of the State of North Carolina go on record as supporting wholeheartedly the stated budget requests of Dean Isaac M. Taylor, and that the good offices of the Medical Society of the State of North Carolina do all in its power to effect appropriate budgetary response.

Dr. H. M. Poteat, Jr., Chairman of the Committee on Legislation presented a discussion of chiropractic

proposal for amending the voluntary health insurance law of North Carolina relative to equating payments for medical services performed by chiropractors as for medical doctors provided in such insurance contracts.

On motion made, seconded and carried, the Executive Council went on record as opposing the legislative proposal of the North Carolina Chiropractic Association.

A proposal of the North Carolina Physical Therapy Association to rewrite the Physical Therapy Act was recommended by the Committee on Legislation subject to a negotiation of a grandfather clause relative to certain hospital employees functioning in areas of physical therapy with the hospital. On motion, seconded and carried, the recommendation was accepted.

Based on report of the Committee on Legislation a proposed Anatomical Gift Act was voted endorsement by the Executive Council.

The Executive Council received a report of the Committee on Legislation relative to a proposed bill establishing authority for physicians to practice in corporate form. The report was generally approved by consensus as relates to previous action by the 1968 House of Delegates which approved this type of legislation.

The Executive Council received two recommendations from the Committee on Mental Health supportive of legislation to establish mandatory licensing of child day-care facilities as recommended by the North Carolina Legislative Research Commission. On vote the Executive Council approved this recommendation.

The executive Council received two recommendations that the public school attendance laws be amended as follows:

That the statute be amended to assure that any child should first have competent medical, psychological, social, and educational appraisal;

Secondly, that upon that appraisal the Superintendent can make such a decision; that if the parent so decides, that they could appeal such a decision to the Board of Education of the jurisdiction in which the child resides; and that then the Board could have the authority to order subsequent examinations or to overrule the principal or to support him; that if the parents so decided then that the decision was still against them, that they could appeal to the courts.

Secondly, the idea relates to the next statute in the law, which is 115-156, which is just a clarification. The present law requires that a child be physically present for enrollment at the compulsory age. There has been some discussion, and there have been several places where the attorneys felt that it would be wise to amend this statute merely to say that when such a child becomes of school age, the parents can merely present evidence of medical, psychological, and social examination, and not physically have to transport the child to the Superintendent for admission.

The Executive Council voted to endorse these recommendations.

The Executive Council, by vote, accepted the recom-

mendation of the Mental Health Committee, in receiving as information the proposal for the establishment of a North Carolina Foundation for Alcoholic Problems.

The Executive Council, by vote, agreed to support in principle the fact that the "B" Budget recommendations for the State Department of Mental Health is inadequate and that it should be increased to the maximum possible with available tax revenues.

A resolution entitled, "Mental Health and the Law Offender," was adopted by vote of the Executive Council as follows:

WHEREAS, the MSSNC recognizes that law offenders in significant percentage suffer various psychoses, neuroses, alcoholism, drug abuse, and other diagnosable mental disorders; and

WHEREAS, the Society is cognizant of the fact that of these offenders there are those returned to their communities from even short periods of incarceration made worse by the experience; and WHEREAS, the Society realizes the need for increase knowledge and rehabilitation facilities for these offenders; now be it therefore

RESOLVED, that it shall be the policy of the MSSNC to support and encourage State and local correctional agencies in a comprehensive effort to correct the behavior problems of offenders coming under their general jurisdiction; and be it further RESOLVED, that the MSSNC does urge diagnostic evaluation of each offender as to the causes of his offense and to possible correctional and rehabilitative procedures; and be it further

RESOLVED, that the MSSNC does suggest the following recommendations for the improvement of evaluation and rehabilitation of law offenders:

- (1) The development of appropriate educational programs in mental disorders of law offenders for the professional training of physicians, allied health professionals, law enforcement officers, and such others as have responsibility for rehabilitation and correctional programs within our State.
- (2) The development of research projects into the cause, prevention and treatment of criminal deviant behavior.
- (3) The development of appropriate affiliation between the profession of medicine, through its medical schools and professional organizations, and those agencies charged with rehabilitative, correctional supervision of law offenders.

On recommendation of the Blue Ribbon Committee No. 1, the professional management consultant firm of Rothrock, Reynolds and Reynolds (of New York and Miami) for a stated fee of \$8,500.00 was, by vote, approved to make an in depth study of the Headquarters operations of the Society.

The Executive Council considered and accepted by vote an interpretation of the November 10, 1968 action of the House of Delegates allowing the members to prepay dues increments for the future years of 1970-1973 any time during 1969.

On nomination of Dr. Styron, the name of K. D. Weeks, M.D., of Rocky Mount was placed in nomination to fill the vacancy on the Board of Trustees, North

Carolina Blue Cross Blue Shield, Inc., for the unexpired term of Dr. C. T. Wilkinson, deceased.

On motion made and seconded, the Executive Council elected Dr. Weeks.

The Executive Council recessed for lunch at 12:45 p.m.

Sunday Afternoon Session

The Executive Council reconvened at 2:20 p.m.

The nomination of Dr. Edwin H. Martinat as Outstanding Physician of the Year in the treatment of the handicapped, by vote was approved.

The Executive Council voted to approve a recommended brochure of guidelines for implementing and reporting activities under the North Carolina Therapeutic Abortion Law as presented by the Committee on Maternal Health which was authorized to be mailed to all physicians and included in the Orientation Kit for new physician members.

On motion by Secretary Charles W. Styron, duly seconded, the appointment of Drs. George Gilbert, Thomas Thurston and Philip Naumoff, for another two-year term on the Board of Directors of the North Carolina Association of Professions was, by vote, approved.

The Executive Council gave an extensive hearing to physician representatives of the North Carolina Conference of County Health Directors following which Dr. D. A. McLaurin presented a negotiated resolution to wit:

WHEREAS, there has arisen considerable misunderstanding of certain recent proposals of the North Carolina State Board of Health pertaining to the employment of lay public health administrators, and WHEREAS, the Executive Council of the Medical Society of the State of North Carolina has been asked for support of certain changes in the general statutes of the State of North Carolina as these pertain to local health administration; and WHEREAS, the Council has duly considered the information received from the North Carolina Conference of Health Directors and has consulted with the State Health Office, and WHEREAS, it appears that problems exist on behalf of both groups: now, therefore be it RESOLVED, that the Executive Council of the Medical Society of the State of North Carolina does adopt the following policy on the matter of local health administration:

- (1) that the local health department should be under professional medical public health administration whenever possible;
- (2) that in the event of the non-availability of appropriate medical administration the utilization of lay public health administrators is approved;
- (3) that in the event lay public health administrators are utilized, there shall be appropriate medical consultation available to insure the soundness of professional medical decisions;
- (4) that the salaries of physician public health directors should be competitive and consonant with their training experience and responsibility through use of both local and state funds;

- (5) that the job descriptions prepared by the North Carolina State Board of Health and the State Personnel Board pertaining to health administrators be approved.
- (6) that the development lay administrator training programs by the North Carolina School of Public Health be encouraged;
- (7) that appropriate changes in the general statutes reflecting these policy statements will be supported;
- (8) that the active recruitment of qualified physician public health administrators be encouraged and supported.

On motion, made and seconded, the resolution was adopted by vote of the Executive Council.

The Executive Council received a report and recommendation of a proposal for "Advanced Training for Paramedical Personnel in Emergency Medical Care" as developed by the Committee on Disaster Medical Care.

On motion, duly seconded, the Executive Council approved the recommendations with one dissenting vote.

Anent previous recommendations of a prior Committee on School Health (now dissolved) the Committee on Mental Health of the Society recommended a formal communication by the Society to the Honorable Craig Phillips to the effect that the Medical Society of the State of North Carolina is willing and desirous of lending its assistance in improving the quality of public education for North Carolina.

On motion, seconded and carried, the writing of this communication was left to the discretion of the President of the Society.

The Executive Council by vote approved the expenditure of \$350 of Society funds in support of a one-day Conference between hospital administrators, nurses and physicians.

The Executive Council adjourned at 3:55 p.m.

Respectfully submitted,

James T. Barnes, Executive Director

EXECUTIVE COUNCIL MEETING

Sunday Morning

March 23, 1969, 10:05 o'clock a.m. at the Velvet Cloak Motor Lodge, Raleigh, North Carolina. President David G. Welton, presiding. A quorum was declared.

An interim report of the Committee on Finance was made as information by Wayne J. Benton, M.D., Chairman, which showed consonant progress in dues procedures in comparison to former years.

On motion, seconded and carried, the Executive Council authorized the Society membership on the Governor's Advisory Committee on Beautification at \$50 per year.

The Executive Council received a study and report of the Society Council on Planning (Blue Ribbon No. 2) containing seven recommendations for future concern or implementation as follows:

- 1) We feel that the Medical Society of the State of

North Carolina should be more involved and view without prejudice, but with excited interest, the development of additional types and numbers of paramedical personnel and that this Society should engage in the active achievement of standards, curriculae development and curriculum delivery and finally, the specific or the finer points of the training of new forms of paramedical personnel or people.

2) That medicine has a responsibility and shall assume its full responsibility for the full delivery of illness care and health care services, the apex of the pyramid concept.

3) Medicine should explore with the Governor, the Councils of state, the probability of encouraging those who are appointed M.D.s to the state boards and councils to consult with the State Medical Society prior to these appointments because the Society and only the Society has knowledge of its membership, and its terms and its interest.

4) That the Society begin now with planning that will require evidence of continuing education on the part of every and all physicians in the state. This contribution shall be either on the basis of a requirement for membership in the state or component society, or possibly as a prerequisite to registration of license over so many years, five or whatever it takes.

We must look forward to the day when this Medical Society demands evidence of freshening and continuing postgraduate education for all doctors of medicine in the state whether they be certified or not certified, as well as certain echelons of the paramedical.

5) In the area of the headquarters facility and long range planning, this group really only discussed one element, that one being the need for built-in provisions in the original plans for expansion in the future if such becomes necessary and it is thought wise. This could be done either on the high-rise principle or horizontal projection.

6) The Society shall officially engage in formulations which involve medical practice patterns to the end that optimum delivery of medical care for as many people as possible is probable.

Here, the Planning Council not only refers to the creation of the new members of the health team, such such as the physician's assistant, or inasmuch as some people dislike the use of this word, then Meditechs, but also to a segment which for want of a better term we will call health education aides which technically speaking is low post on the totem pole of medical care.

Secondly, the Planning Council suggest the Society engage in the consideration of a step ladder of health management in sparsely settled areas or in the crowded and thus similarly isolated urban areas. Such a pattern can be diagrammed as a nest of rings.

At the outermost perimeter, the ring is the health aide; then, the physician of first contact with his or her meditechs and expanding to the outer rings of the physician. Actually, this ring would be four to six M.D.s of the generalist type operating closer or loosely on a clinic basis.

Here, the great majority of medical complaints could be managed.

The next ring in the step pattern would be the area hospital whose services would then necessarily cross geographical bounds. This is an area in which there is going to be trouble in considering and it would be a joint operation located with reference to the centers of population within, say for example, a five county region. Any hospital of less than 150 or 200 beds in a city would possibly be considered non-feasible.

The next step is the regional hospital care. In the regional hospital care concept is the regional hospital itself with in-flowing medical care problems.

Here, all the specialties of medicine would be represented.

Finally, the so-called centers which would accept the problem cases.

7) Consideration of planning for the internal relations of medicine and the external relations of medicine, such as public legislation, information and liaison with other health care bodies was discussed and will be contained in a subsequent report.

No formal action was requested nor taken on these aims and goals.

The Executive Council received report from the Committee on Headquarters Facility relative to three appraisals of Highway 70 tracts as information for future consideration.

The Executive Council received schematic architect drawings on a proposed Headquarters building. The subject was discussed in extensive detail related to incorporating substantial basic construction factors permissive of future upward or expansion construction as would be permitted under zoning regulations of the City of Raleigh. The Executive Council instructed the contracting developer to secure and report cost estimates comparing present cost for future horizontal versus vertical expansion of building construction at the May 17th Meeting of the Council.

A proposition relative to the Society's Committee structure and reports emanating from the Committees at the fall Conclave of Committees through the six Commissioners was presented as follows:

That this Council take positive action on the recommendation of Dr. Lymberis that future planning of this Council and its associated Committee conclave be engineered to allow an interim period of six weeks between the time of the committee meetings and the Commissioners receive their minutes to the time they're presented to this Council—and informing the Executive Council.

On motion duly seconded and by vote carried, this policy was recommended to the incoming President of the Society for his consideration.

Vice President John Glasson reported on the representatives of the Society participation in two national conferences related to AMA Resolution No. 52 relative to structural developments within the state and component North Carolina county medical societies for a Committee on Joint Commission on Accreditation of Hospitals.

Resolution No. 52 would actively encourage each county in the State Medical Society to form a Committee on JCAH with the specific purposes of studying present and future requirements of the Joint Com-

mission on Accreditation of Hospitals, evaluate hospital staff complaints, communicate regularly with AMA Commissioners to the JCAH and making constructive suggestions for revisions or improvements in the standards.

The chair asked First-Vice President Dr. Glasson, after consulting with Dr. Beddingfield, Mr. Barnes and Dr. Lymberis, to prepare a letter to go out with the endorsement of the Council to this effect, that the present Committee on Hospital and Professional Relations will be available for consultation by county units, which may or may not want to set up their own committee and we will supply them with the new draft of JCAH Principles and Standards when it is available.

A proposal cited by the Committee on Drug Abuse to the North Carolina Board of Pharmacy relative to the establishment of a regulation to provide labeling of prescriptions filled by pharmacists to contain an expressed label "Caution—Affects Driving Ability", when such prescription contains amphetamines, antihistamines, and other central nervous system stimulants and tranquilizers (or combinations, containing same) was, by vote of the Executive Council referred back to the Committee on Drug Abuse for further study and also referred to the Committee Liaison to the North Carolina Pharmaceutical Association.

The Committee on Drug Abuse recommended that the Executive Council of the Medical Society of the State of North Carolina recommend to the County Societies support of the SBI Van Display to educate the various areas of the State on the problems of drug abuse and to encourage area physicians to aid and assist in the training of paramedical personnel and educators in the incorporation of drug abuse instruction at the school level.

On vote of the Executive Council the recommendation was approved.

An interim report in some detail was presented by the Ad Hoc Committee to study Blue Shield with the statement that further report will be made by the said committee in May. One item of by-law revision was authorized by vote of the Council, to be referred to the Committee on Constitution and By-Laws for study and report.

The Executive Council considered the details of a proposed Occupational Health Act for North Carolina and, by vote, endorsed such an act in principle.

The Executive Council recessed at 12:40 p.m. for lunch.

The Executive Council reconvened at 2:15 p.m.

On motion, seconded and carried, the Executive Council approved the preliminary architect sketches (a schematic drawing) which had been inspected in detail by members of the Council during the lunch hour.

On motion, duly seconded, the Executive Council considered a detailed report of the N. C. Board of Medical Examiners relative to five recommended changes in the Medical Practice Act as follows:

To increase the examination fee from \$50 to \$100; increase the registration fee from \$5 to \$10 on the biennial basis; and change the wording of the Medical Practice Act so that we can return a license under certain conditions, and change the one place where it says we may examine to provide that this accepts the Flex examination; and limit the fee to \$100 for the penalty for failure to register—the maximum be limited to \$100.

Upon call of the question the Executive Council voted to approve the five recommendations stated and directed the Committee on Legislation to take appropriate action to seek amending legislation in the General Assembly.

The Executive Council received a recommendation from the Committee on Medicine and Religion for use of funds to cover travel for a consultant non-member to said Committee to AMA Conference in Atlanta, Georgia. On vote of the Executive Council such travel expenses were authorized.

The Executive Council received a report from general counsel relative to the following amendment proposed to the pending corporate practice bill in the General Assembly. Except for professional corporations as defined in this act, it shall be unlawful for any corporation, lay body and so forth, to undertake to engage in the practice of a profession named in this act (which includes medicine, of course) through the means of engaging the services upon a salary or commission basis of one licensed to practice one of the above professions in this state.

On motion, duly seconded and carried, general counsel was instructed to seek the elimination of this proposed section in the bill.

The Committee Advisory to the N. C. Department of Motor Vehicles recommended legislation which would exempt physicians from a lawsuit if the physician should decide to report to the Driver License Division a patient or person whom he knows to have a medical or mental condition which would prevent him from driving safely. Incorporated in this law would be a provision preventing any physician reporting an individual with malicious intent. This is comparable to the "Good Samaritan" law passed two years ago without any difficulty.

On motion, this proposed legislation was referred to the Committee on Legislation for consideration, and by vote made such referral.

The Executive Council adjourned at 4:32 o'clock p.m.

James T. Barnes, Executive Director

Adjourned Mid-Winter Meeting of the Executive Council

March 23, 1969

The Executive Council of the Medical Society of the State of North Carolina met in special Adjourned Mid-Winter Meeting session at the King Charles Room of the Velvet Cloak Inn, Raleigh, N. C., at 10:00 o'clock March 23, 1969, President David G. Welton, presiding. Upon roll call by the Executive Director a quorum was declared. Vice Councilors representing instead the Councilors of the Second, Fifth and Sixth Districts were recognized as voting members of the Executive Council session and AMA Trustee John R. Kernodle was recognized. Minutes of the January 26, 1969 (adjourned) meeting upon motion, seconded and carried were approved. President Welton announced that, except for items of extreme urgency, future Executive Council agenda would be closed two weeks in advance of a scheduled meeting and requested Councilors to keep this rule in mind as well as to so inform component societies of this rule.

An interim report was made by the Chairman of the Finance Committee indicated due progress in 1969 dues collections and a stable situation in the finances of the Society.

Consideration was given to the Society as a participant in the Governors State Beautification Committee involving a \$50 membership due. On motion, duly seconded and carried, participation and dues of \$50 were authorized.

An interim report of the Committee on Legislation related principally to legislative appropriation hearings on Medicaid and the indication of State policy fairly coinciding with the Society's policy on usual, customary and reasonable medical service allowances for public assistant recipients (as well as other State medical service programs) and the tentative budget request of \$92 million in support of Medicaid. It was the sense of expression that the tentative estimates would be sufficient for the minimal concepts of the program in 1970. No formal action was taken by the Executive Council.

An interim report of the Planning Council of the Medical Society was presented by its Chairman, Dr. Frank W. Jones, involving six areas of concern: 1) The society and its relation to its membership; 2) The society and its relationship to the delivery of medical care; 3) The Society and its posture with reference to leadership in the health care field; 4) The society and its role in medical and para-medical education basic, graduate and ongoing; 5) The society and its attitude in Medico-socio-economics, and; 6) General categories of thinking. The report further offered informally six areas of suggestions of current critical import: (1) We feel that the Medical Society of the State of North Carolina should be more involved and view without prejudice, but with excited interest, the development of additional types and numbers of para-medical personnel and that this Society should engage in the active achievement of standards, curriculae de-

velopment and curriculum delivery, and finally, the specific or the finer points of the training of new forms of paramedical personnel or people.

2) That medicine has a responsibility and shall assume its full responsibility for the full delivery of illness care and health care services, the apex of the pyramid concept.

3) Medicine should explore with the Governor, the Councils of State, the probability of encouraging those who are appointed M.D.'s to the state boards and councils to consult with the State Medical Society prior to these appointments because the Society and only the Society has knowledge of its membership, and its terms and its interest.

4) That the Society begin now with planning that will require evidence of continuing education on the part of every and all physicians in the state. This contribution shall be either on the basis of a requirement for membership in the state or component society, or possibly as a prerequisite to registration of license over so many years, five or whatever it takes.

We must look forward to the day when this Medical Society demands evidence of freshening and continuing postgraduate education for all doctors of medicine in the state whether they be certified or not certified, as well as certain echelons of the paramedical.

5) In the area of the headquarters facility and long range planning, this group really only discussed one element, the one being the need for built-in provisions in the original plans for expansion in the future if such becomes necessary and it is thought wise. This could be done either on the high-rise principle or horizontal projection.

6) The Society shall officially engage in formulations which involve medical practice patterns to the end that optimum delivery of medical care for as many people as possible is probable.

Here, the Planning Council not only refers to the creation of the new members of the health team, such as the physician's assistant, or inasmuch as some people dislike the use of this word, then Medi-tac, but also to a segment which for want of a better term we will call health education aides which technically speaking is low post on the totem pole of medical care.

Secondly, the Planning Council suggests the Society engage in the consideration of a step ladder of health management in sparsely settled areas or in the crowded and thus similarly isolated urban areas. Such a pattern can be diagrammed as a nest of rings.

At the outermost perimeter, the ring is the health aide; then, the physician of first contact with his or her medi-tacs and expanding to the outer rings of the physician. Actually, this ring would be four to six M.D.'s of the generalist type operating closer or loosely on a clinic basis.

Here, the great majority of medical complaints could be managed.

The next ring in the step pattern would be the area hospital whose services would then necessarily cross geographical bounds. This is an area in which there is going to be trouble in considering and it would be a joint operation located with reference to the centers of population within, say for example, a five county region. Any hospital of less than 150 to 200 beds in a city would possibly be considered non-feasible.

The next step is the regional hospital care. In the regional hospital care concept is the regional hospital itself with in-flowing medical care problems.

Here, all the specialties of medicine would be represented.

Finally, the so-called centers which would accept the problem cases.

7) Consideration of planning for the internal relations of medicine and the external relations of medicine, such as public legislation, information and liaison with other health care bodies was discussed and will be contained in a subsequent report.

Please consider that this report today represents evidence of the Planning Council's thrust towards goals and if some of it sounds like a philosophical conceptualization, then it must be accepted as that.

Without the establishment of aims and goals, a group cannot establish plans for effecting those goals.

No action was taken on the report.

Chairman A. Hewitt Rose, Jr., M.D., presented a report for the Committee on Headquarters Facility anent instructed securrence of Highway 70 property appraisals and reported three such appraisals from Charles B. Douglas (Raleigh), Ford S. Worthy, MAI (Raleigh) and Judson Pickett, MAI (Durham), which are of record with the Society. Dr. Rose reported on the schematics of plans for headquarters building and presented drawings for consideration of the Executive Council. (These were carried over to the lunch hour for individual inspection). Dr. Rose referred to anticipated decision making during the spring and summer and requested that an "executive committee for decisions," formed from members of the Committee on Headquarters Facility, be authorized by the Executive Council. On motion, duly made seconded and carried, the Headquarters Facility Committee was empowered to set up an "executive committee" for the purpose of rendering interim decisions. The Chairman, Dr. Rose, being authorized to appoint the committee. Further discussion ensued relative designing foundation and construction initially to later accommodate additional floor levels over and above the two levels expressed in the schematic design and the prospect of the acquisition of additional lot space to meet zoning regulations in such event. Developer Ford Worthy was instructed to investigate all feasibility factors for the Committee on Headquarters Facility and be prepared to report with the Committee on May 17, 1969 all of the factors of design acquisitions and costs to be involved in an upward extension or horizontal extension of construction for additional floor space in the proposed schematic building presented

today. The lunch hour having intervened, a motion was made in the afternoon that the preliminary schematic sketches of the Headquarters building be approved; upon being seconded and question put the motion carried.

President Welton reported his observations on the pressures upon the Executive Council in properly and adequately considering reports of Committees and Commissioners the day following the Fall Conclave of Committee meetings and the recommendations evolving from actions in these meetings and indicated communication to Councilors which suggested to him need for decision as to what the Council should plan about such considerations. Discussion indicated the consensus that the haste of minute transcriptions and excerpts for Commission reports, resulting in not giving good reports or giving committees just consideration for their actions and recommendations within the 24 hours of elapsing time at which reports are made to the Executive Council for policy determination. A motion was made that the Executive Council take positive action so that future planning of the Council and its associated committee conclave be engineered to allow an interim period of six weeks to be flexible as the President wishes between the time of the committee meetings and the Commissioners receive the minutes to the time such are presented to the Council and informing the Council of committee actions. The motion was duly seconded and on vote carried.

Consideration was given to AMA Resolution Number 52 which relates to action of the House of Delegates on Reference Report "C" devolving upon state and county medical societies encouragement to actively evaluate and communicate critiques on the proposed standards and principles expressed in draft form by the Jonit Council on Accreditation of Hospitals as criterion for JCAH approval of hospitals. It was the sense of the Executive Council that this responsibility should rest particularly on the Committee on Hospitals and Professional Relations rather than to designate a new Society Committee or to engender the creation of such action committees in component county societies in North Carolina. First Vice President John Glasson, after consultation with the President-elect and others, was authorized to communicate, with the endorsement of the Executive Council, a letter to component societies to effectuate the responsibility of the Committee on Hospitals and Professional Relations in relation to critical views and situations evolving local to hospitals and to furnish final draft of JCAH standards and Principles when such has been concluded. (Vice President John Glasson assumed the chair at this interval of the Executive Council Meeting.)

A recommendation of the Committee on Drug Abuse was presented as follows: That the Executive Council of the Medical Society of the State of North Carolina recommend to the county societies support of the State Bureau of Investigation "van display" (on drug abuse) to educate the various areas of the state on the problems of drug abuse and to encourage area physicians

to aid and assist in the training of para-medical personnel and educators in the incorporation of drug abuse instruction at the school level. A motion to approve the recommendation was duly seconded and carried.

Consideration was given on referral from the Committee on Drug Abuse, of an exploratory request to the N. C. Board of Pharmacy that it consider promulgating a regulation requiring pharmacists to label certain prescriptions containing barbiturates, amphetamines, antihistamines, tranquilizers and other central nervous system stimulants and tranquilizers with a statement "Caution—Affects Driving Ability," was discussed in depth on the basis of a letter communication from the Secretary of the N. C. Board of Pharmacy seeking definitive information on Society policy. It was moved that the matter of such labeling be referred back to the Committee on Drug Abuse for further study and that it also be referred to the Committee Liaison to the North Carolina Pharmaceutical Association for their deliberation and report back. The motion was duly seconded and on vote carried.

Chairman John S. Rhodes, M.D., of the ad hoc Committee to Study Blue Cross and Blue Shield reported on the progress of the Committee and pointed to the phase out aspects of the Doctor's Program of insurance and the indication to revise the By-Laws of the Society in relation to the structure and functions of the Committee on Blue Shield. On motion Chairman Rhodes was authorized to refer to the Committee on Constitution and By-Laws a proposal for structuring the establishing aspects of function of the Committee on Blue Shield. The motion was duly seconded and carried. Otherwise, Dr. Rhodes indicated the need for a revision in the Society's "Statement of Understanding" with the new (combined) Corporation and the indication that physician participation agreements would no longer be in required effect by the new corporation. On motion, duly seconded and carried the report of the Committee to Study Blue Cross-Blue Shield was accepted.

A proposal to amend the statutes of North Carolina, at the instigation of the N. C. Physical Therapy Association, was presented by the Committee on Legislation. The proposal would 1) include the registration of physical therapy assistants by statute 2) deletion of set fee for registration of physical therapists leaving registration fees in the discretion of the examining committee of the Association as provided by statute and 3) altering the statute to a mandatory requirement relative to unqualified individuals. The proposal had been reviewed in depth by the Committee on Legislation and it recommended the changes sought by the Physical Therapy Association. On Motion made, duly seconded and carried, the recommendations were approved.

Discussion was given to a drafted bill to effectuate an Occupational Health law for North Carolina designed to obviate the effect of probable enactment of a Federal Law now pending in Congress. The Committee on Occupational Health and the Committee on Legislation had reviewed the drafted bill and both

approved and recommended it in principle and will further make review of the compulsory features of the bill in reference to physician immunity from the requirement of disclosure so that the introduced bill may include that desirable feature. A motion was made that the Executive Council endorse the bill in principle. The motion was seconded and on vote carried.

(The Council recessed at 12:45 o'clock P.M.)

The Executive Council reconvened at 2:15 o'clock P.M., President David G. Welton presiding.

The Committee on Mental Health conveyed a request that the Executive Council revise portion of a Resolution approved by the Council on January 26, 1969 meeting related to the "Law Offender." Discussion ensued. A motion was made that there be no change in the wording of the Minutes of the Executive Council as it transpired on January 26, 1969. The motion was duly seconded and, on vote, carried.

As president of the North Carolina Board of Medical Examiners Frank Edmundson, M.D., reported to the Executive Council the formal and recent action of that Board to accept applications for medical license from Osteopaths who have graduated since 1960 and will grant license to those who pass the examination. He expressed the hope to handle Osteopathic applicants for endorsement in a similar fashion. He also reported that the Board was considering the adoption of the Flex system of three-part examinations for medical licensure and pointed to the indication that some factors of the Medical Practice Act would require changes relative to the stipulation of fees for examination, registration and re-registration as well as to parts of the examination.

On motion, duly seconded, the Executive Council approved of the Board of Medical Examiners seeking amendments to the Medical Practice Act for the following: 1) Increase examination fee to \$100; 2) Increase the registration of license fee to \$10; 3) reward the Act so as to permit a return of license to a former licensee on conditions; 4) reward the Act to permit the giving of the Flex system of license examination, and; 5) to limit the maximum penalty for failure to re-register to the sum of \$100. The motion, upon being put, carried.

Motion was made that the five proposed amending items to the Medical Practice Act be referred to the Legislative Committee as policy determinations of the Society for appropriate action. The motion was seconded and on vote carried.

(Vice President John Glasson assumed the Chair.)

On motion, duly seconded and carried, the payment of out-of-state travel for a non-member consultant to the Committee on Medicine and Religion was authorized.

Consideration of a publishment proposal relative to a listing of services rendered by various pathologists in the state, which had been submitted to the N. C. Medical Journal Editor and classified as "non-article" by editorial consultants, came for consideration from the Regional Medical Program relative to it publishing the listing. Motion was made that the Executive

Council adopt as its policy the decision made by the Dictorial Board of the Journal. The motion was duly seconded and, upon being put, carried.

Having heard the previous report of the President of the State Board of Medical Examiners in regard to its deliberations regarding the licensing of osteopath to practice medicine in North Carolina, a motion was made that the Executive Council go on record as endorsing that report. The motion was seconded, discussed, and the question being called, the motion carried.

Mr. John Anderson alluded to an amendment incorporated into the bill before the General Assembly to create a Professional Corporation Act, which amendment expressly prohibits as "unlawful for any corporation, lay body and so forth, to undertake to engage in the practice of a profession named in this act through the means of engaging the services upon a salary or commission basis of one licensed to practice one of the above professions in this state," and querying the wishes of the Society "relative to the modification, retention or deletion of such amendment. A motion was made to approve Mr. Anderson's proposal that the provision of such amendment be deleted from the bill. The motion was seconded and upon being put, the motion carried.

A letter communication concerning legislation to exempt physicians from litigation should a physician report to the State Driver License Division a patient or person whom he knows to have a medical or mental condition which would prevent him from driving safely was discussed at length. Divers involvements were cited as to possible deterrents to the operation of such a law. On motion, the communication was referred to the Committee on Legislation. The motion was duly seconded and carried. The Executive Council adjourned at 4:32 o'clock P. M.

SATURDAY MORNING SESSIONS

May 17, 1969

Meeting of the Executive Council at the 115th Annual Session of the Society, May 17, 1969 at The Carolina Hotel, Pinehurst, N. C., 9:15 o'clock A.M.

The Executive Council convened at 9:15 o'clock A.M., May 17, 1969, with President David G. Welton, M.D., presiding. Invocation was rendered by John Glasson, M.D., Vice President. President Welton welcomed distinguished members. Call of the roll was made by Secretary Charles W. Styron upon which he declared a quorum present. On motion made, seconded and carried the minutes of the previous March meeting were approved.

The 1969 budget, presented by the Finance Committee at the January 26, 1969 meeting of the Executive Council was considered and on motion, duly seconded and carried was approved.

A resolution labeled (A) related to Mental and Physical Examinations for Children Entering Elementary School was read as it emanated from the Committee

on Community Rural and Urban Health and on motion duly seconded and carried was authorized to be placed on the agenda of the House of Delegates.

A resolution (B) on the Training of Family Physicians, also emanating from the Committee on Community Health was read and on motion duly passed was referred to the Agenda of the House of Delegates.

A resolution labeled (C) on Training of Nurses emanating from the Committee on Community Health was read and on motion, duly passed was referred to the Agenda of the House of Delegates.

A resolution labeled (D) on Traffic Safety emanating from the Committee on Community Health was read and on motion, duly passed was referred to the Agenda of the House of Delegates.

A resolution labeled (E) on Safety Frame and Roll Bar for Tractors emanating from the Committee on Community Health was read and on motion, duly passed was referred to the Agenda of the House of Delegates.

A resolution labeled (F) on Environmental Pollution emanating from the Committee on Community Health was read and on motion, duly passed was referred to the Agenda of the House of Delegates.

A resolution labeled (G) on Physical Examinations and Retirement Age of Government Officers emanating from the Committee on Community Health was read and on motion was discussed at length upon which a substitute motion was made to delegate from the Executive Council a request to the Committee Chairman that resolution (G) be withdrawn and not referred to the House of Delegates. With some negative votes, the motion carried by a majority. Secretary Styron was so delegated by the President.

A resolution labeled (H) on a Proposal of Daily An-Hospital Money Payment Plan by the Kemper Insurance Group emanating with recommendations from the Committee on Professional Insurance was read and on motion duly passed was referred to the Agenda of the House of Delegates.

A resolution labeled (I) on Continuing Studies of Disasters emanating from the Committee on Disaster Medical Care was read and on motion, duly passed was referred to the Agenda of the House of Delegates.

A resolution labeled (J) on matter of recommendation for a Permanent Committee on Medical Education emanating from ad hoc Committee on Medical Education was read and on motion, duly passed was referred to the Agenda of the House of Delegates with full information that the Committee on Constitution and By-Laws will have prepared an implementing By-Law amendment for the consideration of the House of Delegates.

President introduced the annual Compilation of Reports of Committees, Councilors and Commissioners in connection with which Commissioner H. J. Cutchin reported upon recent observations of the inter-relationship of the Committee Advisory to the Industrial Commission and a recommendation to be presented to the Reference Committee relative to advancing Society action on problems within the Industrial Commis-

sion relationship; problems of inequity in the state and intermediary administration of payments for physicians' services to Public Assistant recipients, and; matters relating to the functions of the Committee on Blue Shield which he recommended be studied in depth by the Society through the ad hoc committee to Study Blue Shield. Lengthy discussion ensued on proposed and pending legislation related to Industrial Commission physician fees and hospital allowances resulting in a concert of opposition to the Staton Bill—Senate 578—pending in the General Assembly and instructions to the Committee on Legislation to oppose said bill. (The Compilation of Annual Reports on motion, duly passed was referred to the House of Delegates.)

Vice President Glasson assumed the Chair and called for Special Reports, recognizing Dr. Shaffner as Chairman of the Committee on Constitution and By-Laws to report on amendments in which he cited ratification of an amendment to the Constitution authorized by the 1968 House of Delegates; amendment of By-Laws, anent the organization of the Society delegates to AMA-House of Delegates; amendment to By-Laws establishing and defining the duties of a Committee on Medical Education, and; amendment of the By-Laws revising the structure, tenures, qualifications and duties of the Committee on Blue Shield. He also reported a proposed amendment to establish a new Commission (with Commissioners) entitled, "Developing Government Health Programs Commission" to encompass present Committees titled: Appalachia-State of Franklin; Comprehensive Health Planning; Directors of Regional Medical Program; Claims Review on Medicare and Medicare as a Committee title with the discretion of the President to add others pertinent to the subject Commission. The report was authorized to be made to the House of Delegates.

President Welton made a progress report relative to the survey study of Headquarters for which Blue Ribbon Committee Number 1 had engaged the firm of Rothrock, Reynolds and Reynolds stating the report was neither completed nor available at this time.

Dr. Mark Lindsey was recognized for his special report on Medical Education related to Resolution "J" of the 1968 House of Delegates which endorsed the establishment of a "permanent Committee on medical education" and action such as this report of the President's ad hoc committee has undertaken pending a By-Law revision properly establishing a permanent committee. The report received commendations for the thoroughness of its explorations and drew expression of anticipated support of the membership. No formal action was recommended nor taken by the Executive Council.

Report of the ad hoc Committee on Medical Education

The ad hoc Committee on Medical Education would like to make the following recommendations to the permanent Committee on Medical Education:

I. COMMITTEE

- A. Definition of function should be made by the Committee itself. It should in turn seek approval of the House of Delegates for its responsibility as a

statewide organization with a basic philosophic charge to aggressive action. It would seem wise to reiterate in this function the need for coordination of the efforts of various allied health personnel as well as the various medical schools, specialty groups in the State, etc.

- B. CONSULTANTS. Consultants should be made available representing:

- a. medical specialties not listed above
- b. consultants representing non-medical allied specialties such as hospital administrators, nurses, lab technicians, x-ray technicians, etc.
- c. representatives should be appointed from community colleges and technical schools because of the importance of these educational institutions in promoting allied health education.
- d. representatives from non-Medical Educational specialties such as (a) libraries, (b) television industry, (c) higher educational boards, and the Department of Education.
- e. representatives of other medically oriented personnel (a) medical students from schools not represented on the permanent committee itself.

C. MEETINGS OF THE COMMITTEE

- a. Recommended that there be held at regular times and permanent locations.

D. FINANCES OF THE COMMITTEE

It seems obvious that the Committee should seek from the Medical Society sufficient funds to engage itself in (a) its exploratory phase, and in its (b) functional phase.

E. MEMBERS

- a. Small in number. The By-Law requires a minimal of ten.
- b. Specific representation should be made from (1) medical schools, (2) specialty groups, Academy of General Practice, (3) Directors of Medical Education, and members at large.
- c. Some medical school student representative should be appointed on the Committee itself.

II. COORDINATOR

The Committee should concern itself with the decision to recommend the appointment of a Medical Education Coordinator whose sole function is the activation of the recommendations and functions of the Committee on Medical Education.

III. STUDY PROPOSALS

It seems obvious that the Committee should concern itself immediately with the study of those existing methods of Medical Education in the under graduate, the post graduate and in the allied health fields.

- a. The various types of continuing educational programs should be reviewed. Its past history including the parts played by the Medical Education Committee of the A.M.A., the medical schools of the State, the Regional Medical Program of North Carolina, and other interested parties.
- b. Long consideration should be given to utilization of an over-all regional type lecture series.
- c. In cooperation with the Annual Meeting Com-

mittee, the Committee on Medical Education should investigate and study the continuing educational phases of the annual meeting of the Society.

- d. The Committee should concern itself with other forms of medical education including local programs in county medical societies and hospital staffs, educational television, radio, audio tapes, and particular interest in the new newer utilization of the telephone as a self-educational medium.
- e. By all means this Committee should function as a central clearing house to make all concerned aware of the post graduate educational phenomenon chronologically and geographically.

IV. OBJECTIVE EVALUATION

- a. The Committee should consider A.M.A. proposal for the recognition award for physicians participating in continuing medical education.
- b. It further should interest itself in the implementation, orientation, and publication of the nature of this award.
- c. It should serve a role in the critical evaluation of the quality and efficacy of each continuing educational phenomenon.
- d. This Committee should study now and in the future advisability of "studies regarding the requirement of evidence of every physician in the state."

V. FINANCING OF PROGRAMS

The Committee should study ways and means of financing continuing educational programs for physicians and for medical students and for allied health personnel. Consideration should be given for the value of these programs to the physician himself. It would appear paramount that he, the practicing physician should assume a substantial portion of responsibility for the financing of such endeavors. These should either be done through the individual participant or through the Medical Society as a medium for all physicians. In addition, however the general public has a strong stake in the results of this striving for better patient care and it is not without reason that through State aid financial backing should realistically be sought. Other sources of financing should be considered, including large foundations, Regional Medical Program in the State, the business community, and the voluntary health organizations, such as the Cancer Society, Heart Fund, pharmaceutical companies, etc.

VI. MEDICAL SCHOOLS

This Committee should function most importantly as a liaison between the teaching medical schools and the practicing physician. It is not without reason that the quality and duration of pre-medical and under graduate medical schools education should fall within the province of the study of this Committee. Relation of under graduate medical education in graduate and post graduate medical education should be scrutinized with an end to the development of means to stimu-

late early the habit of continuing health education. The Medical Society Committee can secure the needs of the practicing physician and lay these before the Planning Committee of the medical schools of this State. Thus it is important that for the benefit of the consumer (the patient population) that the providers of health care (the physicians) and the producers of health care (the medical schools) study the similarity of their interest and concerns. This Committee should actively interest itself in this particular phases of the problem.

VII. ALLIED HEALTH FIELDS

It should be recommended to the permanent Committee that an appointment of the appropriate subcommittee of its members and interested allied health consultants might be a valid starting point for the concern of this Committee in allied health education. This subcommittee should attempt without apology to insert itself into the education of the allied health personnel population. It should strongly attempt to coordinate, and to evaluate working with various groups in the allied health field.

Recognizing the need for continuing recruitment of health works at all levels, the subcommittee should make a careful study of the feasibility of introducing a "core body of knowledge" for students in secondary schools who have evidenced interest in careers in the health field. When possible, the subcommittee should cooperate with the appropriate school officials to aid in setting up new courses of studies for the training of various types of health personnel.

VIII. RECRUITMENT AND SCHOLARSHIPS:

- A. The Committee should concern itself with the responsibility of serving again as a clearing house for scholarships and recruitment of allied health, as well as medical student, personnel.
- B. In addition, the possibility of securing financial aid for practicing physicians entering into continuing medical education programs should be considered.
- C. It should be anticipated that this group study the possibility of functioning as a central agent of statewide locum tenens house for physicians desiring to leave their practice and participate in continuing medical education.

Dr. Hubert M. Poteat, Jr., was recognized for an interim report for the Committee on Legislation related to the session of the General Assembly of North Carolina now in progress; which was generally approved by the Executive Council: Mr. President, submitted herewith is the report of the Committee on Legislation of the Medical Society of the State of North Carolina.

This being a year for the meeting of the North Carolina General Assembly, a great many matters pertaining to medicine have been dealt with by your Committee on Legislation in consultation with and assistance from the President, President-elect, Legal Counsel, the Executive Director and members of his staff.

Many of the matters have developed in the past two months and many more are still pending; hence the necessity for this report at this time and the explanation for it not being included in the compilation of committee reports. This report will be relatively brief but the members of the committee will be available for more detail should that be desired.

The only bill sponsored by the Medical Society, entitled the "Anatomical Gift Act," was prepared, introduced, passed and is now the law in North Carolina. The Legislative Committee wishes to acknowledge with sincere appreciation the efforts of an ad hoc committee consisting of Dr. Delford Stickel, Dr. R. P. Hudson and Dr. L. B. Holt who quarterbacked this measure to its successful conclusion.

The Highway Safety Measures, together with the drunk driver legislation, was enthusiastically supported and while final disposition has not been made, it is reasonable to expect that the implied consent element (this having to do with breathalyzer and blood alcohol level determinations) will be enacted prior to adjournment of the Legislature.

The Osteopath bill has been perhaps the most controversial with which we have had to contend. There is great difference of opinion even in our own circles relative to this matter. Upon advice and consent of the Executive Council and the Board of Medical Examiners our position has been that osteopaths who have graduated since 1960 may apply to the Board of Medical Examiners for permission to write the Board's examination and upon successful completion of the examination may be licensed to practice medicine in North Carolina.

The bill also contains a provision that an osteopath be placed on the Board of Medical Examiners.

We have endeavored to have this provision withdrawn. However, the House passed the measures and it is now pending in the Senate. There is reason to believe that the Senate will delete this provision.

As you doubtless know, all medical schools in the United States (including the three in North Carolina) are in dire need of financial aid and to that end, the Medical Society has supported the recommendation of the Board of Higher Education to the effect that adequate financial support be allocated to University of North Carolina Medical School to the degree that its classes may be enlarged from the present 75 to 200 by 1975.

Further, that the State of North Carolina subsidize Duke Medical School and Bowman Gray Medical School with the amount of \$3,250 per year per North Carolinian admitted, \$1,000 of which is to be applied to the student's tuition and the other \$2,250 is a grant to the schools.

In this way, it is hoped more North Carolinians may be admitted and thus more doctors produced to practice medicine in North Carolina.

Opposition has been mounted to the efforts by the chiropractors to be eligible to recover fees under various health insurance plans.

Support has been given to the physical therapists, the Hospital Association, Mental Health organization,

and the nursing association in various matters relating to their disciplines.

The Medical Society has introduced testimony to various committees of the General Assembly relative to the implementation of Title XIX. This matter is presently in the hands of the appropriations committee and at this time, no indication has been given as to its disposition.

The Corporate Practice Act, relative to the corporate practice of medicine and other professional groups, is also in committee and there is reason to believe that it will be favorably reported and favorably acted upon.

Respectfully submitted, Robert A. Ross, M.D., John Dees, M.D. Hubert McN. Poteat, M.D., Chairman.

General Counsel John Anderson referred to Representative Taylor's constitutional amendment bill which would restrict appropriation of state funds to non-sectarian and non-private institutions which bill had been formally opposed by the Society before committee in the General Assembly. It would prohibit appropriation of state funds in support of private medical school education and diploma schools of nursing.

The Chairman recognized Dr. John S. Rhodes for his special report of the ad hoc Committee to Study the Relationship of Blue Cross-Blue Shield, copy of which report in draft had been sent to each member of the Executive Council. The report was completely read, explained by Chairman Rhodes, supplemented by Dr. Thomas Dulin (a member of the Committee) and discussed at length including the language and portents of a recommended amendment to Chapter X, Section 16, of the By-Laws. A motion that the recommendations of the ad hoc Committee on Blue Shield be transmitted by way of the Committee on Constitution and By-Laws to the House of Delegates for their consideration and that the Executive Council recognizes that the summary of the Committee's recommendation as summarized and defined by Dr. Shaffner comprise a fair statement of the principles enunciated by the ad hoc Committee. The motion was duly seconded and upon vote carried.

Dr. John Rhodes continued his report in reference to the Statement of understanding between North Carolina Blue Cross-Blue Shield, Inc., and the Medical Society necessitated by the obsolescence of the 1967 identical Statements of Understanding developed between the Society and the two Associations then administering Blue Shield Plans and the subsequent elimination of the "Doctors Plan" and physician participating agreements. Dr. Rhodes presented a new Statement of Understanding:

STATEMENT OF UNDERSTANDING

I A long-standing spirit of cooperation and formal liaison between the Medical Society and Blue Cross and Blue Shield in North Carolina has existed since 1935 in the interest of financing better health care for citizens of the State. A "Statement of Understanding" between the Medical Society and the former Associations was executed on March 2, 1957 and now requires revision for the purpose of adapting the relationship

to changed circumstances, the most significant of which are:

1. The January 1, 1968 consolidation of the former Associations into the new North Carolina Blue Cross and Blue Shield Corporation.

2. The elimination of under age 65 income limit "Service Benefit" programs by the consolidated Corporation, thus phasing out the former "Doctor's Program" plans and rendering of no effect the former income limit based participating physicians agreements. (The new Corporation will sell professional benefits coverage only on the basis of scheduled indemnity allowance or coverage on the basis of a percentage of usual, customary and reasonable charges.)

3. Increased support of Blue Shield by the American Medical Association as expressed through resolution passed by its House of Delegates meeting in December 1968 which reaffirmed the AMA's support of medically-oriented prepayment and urged expansion of the scope and level of benefits under the principles of: strong physician leadership with a controlling voice in policy, voluntary subscriber participation, free choice of physician, and the use of usual and customary and reasonable charge concepts.

II Board of Trustees, North Carolina Blue Cross and Blue Shield, Inc.

The Medical Society of the State of North Carolina shall elect physicians to the Board of Trustees of the Corporation and has exercised such right continuously through the antecedent Associations since 1935. Such elected physicians trustees comprise one-third of the membership of the Board and, in conjunction with another one-third of the trustees elected by the North Carolina Hospital Association, have an equal voice in the selection of the remaining one-third of trustees representing the citizens of North Carolina.

Elected physicians trustees have full and equal authority with other trustees to govern the affairs of the Corporation under the provisions of the Corporation's enabling act and by-laws.

III The Blue Shield Committee of the Medical Society of the State of North Carolina.

The Medical Society shall elect a group of physicians as a committee of the Medical Society in accordance with the Constitution and By-Laws of the Medical Society.

Subject to jurisdiction of the Executive Council and House of Delegates of the Medical Society, the Board of Trustees of the Corporation, the North Carolina Department of Insurance, and applicable laws, it is proposed that the Blue Shield Committee with respect to Blue Cross and Blue Shield subscriber benefits for services provided by physicians licensed to practice medicine and surgery shall represent and act for the Medical Society and have the following rights and privileges:

1. To increase, decrease, add to, or delete indemnity scheduled allowances.
2. To assign equitable allowances for professional services of a new, unusual, or complicated nature which are within the scope of certificate benefits but

not specifically listed in schedules of professional benefits.

3. To determine allowances when benefits are paid on the basis of usual, customary and reasonable charges.
4. To arbitrate benefit allowances in cases disputed by physicians, or the Corporation.
5. To assign partial allowances or allowances reduced on a percentage basis when multiple procedures or services are provided, or when services are provided concurrently by two or more physicians.
6. To advise and counsel, when requested by the Corporation or upon its own volition, concerning all aspects of subscriber contracts and the Corporation's communication with physicians through use of publications, letters and personal contacts by the Corporation's professional relations representatives.
7. The physician members of the Board of Trustees of North Carolina Blue Cross-Blue Shield may meet with the Blue Shield Committee at the request of the Committee Chairman or the trustees.

Continuing his report, Dr. Rhodes presented the following:

1. It is practical to continue the present representation of the Medical Society on the Board of North Carolina Blue Cross-Blue Shield at this time.

2. Delete Chapter X, Section 16 of the By-Laws and consider inserting in lieu thereof of the proposed By-Law change as recommended by Dr. Shaffner and his Committee on Constitution and By-Laws.

3. Consider a new Statement of Understanding.

4. Request North Carolina Blue Cross-Blue Shield to add the Chairman of the Blue Shield Committee to the Board of Trustees in ex-officio capacity.

5. That physician members of the Board of Trustees of North Carolina Blue Cross-Blue Shield and members of the Blue Shield Committee elected by the Medical Society be limited to two consecutive four year and three year terms, respectively.

6. That agendas and minutes of the Board of Trustees, having direct or indirect reference to professional services, and the Blue Shield Committee be exchanged. That the President of the Medical Society be requested to implement this exchange of information promptly.

7. That the Committee be continued for one year to permit further study.

Now, at the meeting, there was some discussion about having the Blue Shield Committee Chairman replace the President-elect as an ad hoc member. However, I doubt that the committee wants to recommend that because there may be some reason for continuing both of these people, of making the Blue Shield Committee Chairman as well as the President-elect ad hoc members.

On motion, duly seconded and carried, the Statement of Understanding was directed to the House of Delegates to be referred to a Reference Committee for discussion and recommendation as to adoption.

At this point Councilor Worth requested that Vice Councilor Jack Hughes assume position representing the 6th District on the Executive Council for this meeting.

Dr. A. Hewitt Rose was recognized to report for the Committee on Headquarters Facility and referred to the Committee's progress attained through its meeting May 11, 1969 and through Mr. Ford Worthy of Worthy & Company indicated that Milton Small & Associates had completed preliminary building plans and working drawings. The plans and a building model were displayed by Mr. Milton Small and these were presented by him in detail with particularity of the design to the sloping characteristics of the land and sites of entry from streets to the property and the proposed building along with off street parking facility designs involving stilted foundation structures. Mr. Small reviewed the greater details of the functional design and use of the various areas of the ground and the building levels to be constructed.

Mr. Worthy reported upon request of President Welton, regarding additional structural designs and costs relative to plans for two additional floors if desirable for the future. This involved piling rather than spread footings in the foundation and some aspects of design to comply with city zoning. The cost was reported at the estimate of \$100,000 for the foundation additions and \$20,000 or more mechanical additions. Mr. Worthy recommended the concept of additional foundation construction. He concluded the report to indicate progress to the point of authorizing Mr. Small to proceed with working drawings looking toward a September date for contract invitations. Some discussion pertained to gaining some additional lot footage fronting Person Street. On motion made, seconded and carried, the Executive Council approved the plans of including the additional costs to provide construction of two additional stories at a later date, and that the approval be recommended to the House of Delegates.

President Welton referred to the situation related to Pilot Life Insurance Company's resignation as Medicare carrier and the Social Security Administration's designation of the Prudential Insurance Company as succeeding carrier now evolving a transition at Pilot's establishment in Greensboro to become effective July 1, 1969 and to consultations carried out with Prudential representatives, White, Park and Peck on April 30, 1969.

President Welton recognized Mr. Everett Park of Prudential Insurance Company of Millville, N. J. He related the success of his company as Medicare carrier for the State of New Jersey and the honor of the designation for North Carolina as carrier and spoke of the satisfactory relationship in effecting the transition with Pilot staff and officials. He introduced Mr. Don Peck whom he stated would be in full charge of the carriership in North Carolina for Medicare.

Mr. Donald Peck who expressed optimism that there would be minimum difficulties in making the carrier transition and that their objective will be to do the best job for the beneficiaries in North Carolina, for the general public and to maintain a good on-going relationship with the officials of the Medical Society.

On query Mr. Park indicated Prudential's interest in ultimately administering Medicaid as an intermediary

for North Carolina. Both officials were thanked for their appearances and information.

Dr. Frank W. Jones was recognized for a report of the Council on Planning (Blue Ribbon Committee No. 2).

This constitutes an interpretation of the sense of the Planning Council. It is a collated abridgement of the concerns and deliberations of the group; thus combining the thoughts contained in the Interim Report presented to the Executive Council on March 23, 1969 and the planning framework outlined in the "Considerations Paper" of February 18, 1969.

Due to the press of time and the appearance of multiple conflicts on the part of several members of the Planning Council, a further meeting proposed for a date between March 22 and May 10 was not held. For this reason, that part of this report titled, "Framework for Planning" has not received full formal approval by the Planning Council.

It was further the sense of this Council that the Rothrock Report developed under the aegis of Blue Ribbon Committee No. 1 may, and probably will, influence this Council in its thrust in the area of planning for the Society for the short and long ranges.

The Planning Council of the Medical Society of the State of North Carolina recognizes that there is a distinct difference between policy making and policy executing in the framework of the Society. This Council has neither the right to policy make nor to policy execute. It does have the charge to plan for our Society. At times, this planning will concern itself with the broad spectrum; at times it must concern itself with a degree of minutiae. No attempt in this outline has been made to segregate these two categories.

In some areas, we find this Society inept, especially in the field of broad leadership.

It is the consensus, based upon our collective observations, that those outside of the medical/health field who would direct, plan and even execute health and medical care, can only do so if we abdicate our responsibility to furnish the very much wanted and needed expertise in the areas which we should and in which we know best.

Please consider that this report represents evidence of the thrust of the Planning Council toward goals.

If some of the material submitted sounds like philosophical conceptualization, then it must be accepted as just that. Without the establishment of aims or goals, any group cannot establish plans for effectuating any endeavor.

Much of our opinion is based upon a response, constructively imaginative, we hope, to the demands—and we underline the word "demands"—for medical care by the people; to the end that we may lead, not follow or acquiesce or adjust to plans made by others.

This report should be considered in the same fashion as one proceeds with the building of a home or a commercial structure. The report assumes the position of an architect in proposing location plans, schematic drawings, elevations, and perspectives.

The goals of the planning effort.

This framework we pass on the Council on Planning

for the 116th administrative year. As directed in the initial charge to the Council, they may alter, modify or otherwise change by updating or deletion.

Again, we call attention to the very definite fact that all of the planning subjects outlined herein have not received the full attention of this Council.

Although each item has been presented in writing as areas of concern, this Council has not had the time nor the opportunity to explore the reasonableness of the pursuit of each concern in formulating plans for planning. To use plans for planning seems redundant, yet those among us who have been involved in other planning teams are so very cognizant of the need for a proposed schemata set upon paper. Where some of these elements of planning for planning have been considered by the Council and rejected as non-feasible for one reason or another, such will be noted.

FRAMEWORK FOR PLANNING

"INTER" (The External Relations Thrust)

1. Leadership Role

Planning should be done in a manner which will permit the Society to provide leadership in the mainstream of top policy formulation in the health field, to assist in shaping public policy, to assist in the guidance of legislation with reference to public policy as far as health and health education are concerned and, in particular, with reference to the delivery of health care and the improvements and promulgation of advances in medical science.

2. Sectors of Involvement

This planning should be so structured as to permit the Society to establish a specific identity in the areas which concern themselves with developing and disseminating information regarding the problems which do confront the deliverers of care in this State in the following general areas:

A. A method of defining the cost of illness and health care, and the role of the physician deliverer of health care in defining such cost.

B. Recommendations and thought concerning methodologies of meeting the health manpower needs.

C. The planning of a general scheme for the promotion of adjuvants in the form of paramedical personnel that will extend the outreach of the physician in the conduct of his or her care of the person affected by illness.

D. Actively engage in, and a plan for such, the formation of a clearing house for interprofessional moves in the area of legislation, licensure, recognition of developing fields of the methodologies of the deliverance of care and to the end that there is not conflict, overlap and cross purpose.

E. Planning for an effective liaison and coordination with other deliverers of health care (professional organizations currently engaged in the delivery of care in this State). This should have a special reference to health care, education, research, legislation and public policy announcements. Mechanics of establishing a Society leadership posture in the health field in general:

(a) Guidance of legislation

(b) Health education—general and public

(1) advances in medical science

(2) the medical practice system

(3) information regarding the availability of illness care, preventive and maintenance health care (How can the public secure?)

(c) Provider of care education

(1) To include the development and participation in by the field practitioner in basic curriculae and continuing postgraduate education at technician, technologist, nursing at all levels (baccalaureate and sub-degree types), masters level programs in hospital administration and in health planning, doctoral level programs (M.D.)

(Basic reason is to orient curriculae to the needs of the delivery of care.)

(d) State health planning programs.

(e) Medical schools (especially expansion and new schools).

F. A mechanism for definition of the doctor of medicine's role in federal programs, such as RMP (Regional Medical Program), CHP (Comprehensive Health Planning), MC (Model Cities), OEO (Office of Economic Opportunity) and others.

G. The Society should engage in a policy statement with reference to what really is health insurance coverage for the total gamut of the citizenry.

H. An attempt should be made to define the word "Quality" as such refers to health and illness care for the people of North Carolina.

I. Medicine should explore with the Governors and the Councils of State the probability of encouraging those who do appoint M.D.'s to state-level boards, commissions and councils, the wisdom of consultation with the State Medical Society prior to their appointment of these individuals; this, because this Society and only this Society has the knowledge of its membership, their talents, and their interests. (A current recommendation to the House of Delegates by way of the Executive Council.)

"INTRA" (Internal Relations Thrust)

1. The Constituent Societies

This Society must formulate plans now and subsequently establish policy positions regarding:

A. A Plan for the establishment of a mechanism within the Society to promote the involvement of the component and constituent organizations, the individual membership of the Society, to the end that all of these particular facets of organized medicine in North Carolina engage themselves in an active participation with reference to planning for health care, for illness care and for other areas that affect the health of the populace of North Carolina.

B. A definite statement and plan which refers to the relationship that this Society should have to its constituency and how this relationship should become more cognizant of the needs for services and information as delivered to the membership of the Society.

C. Planning directed toward the providing of a means to continually maintain communications with the component societies in program planning and to the establishment of realistic priorities which would involve

consulting the State Society for information and advice regarding problems that confront them in their particular local areas.

Internal liaison:

- (a) Need for medical policy and socio-economic postures to be managed non-divergently.

Special reference to:

- (1) Medical specialty organizations.
- (2) Component societies.
- (b) Enhancement of communication.
- (c) Methods to encourage local societies to generate and mold state society policy.

2. Service to Membership (Planning For)

I Consider methods of Society involvement in means of increasing the M.D.'s productivity by various means.

A. Elimination or moderation of time-stealing functions presently considered a part of the presumed role of the physician.

- (1) Paperwork (many types)
- (2) Hospital staff and committee meetings
- (3) Delegation of less critical direct care functions to categories of paramedical personnel but with firm and direct overview by the doctor of medicine.

- (a) The funnel or umbrella concept of care. Management of an apical type; not by equistatus committees.

B. Consider computer utilization

C. Time study (critically done) of that part of M.D. function that can be evaluated by such methods. (This is not in conflict with professional management, but if well done would be well worth its cost.)

II Consider a plan for the establishment of a sector within the Society table of organizations (elected or appointed officers and chairmen and staff) to accumulate data which will assist in:

A. Determining the true cost of illness care and of health care separated from the adjunct "costs" commonly attributed to such.

B. Determining the component of cost attributable to the physician and his direct operational assistants.

C. A factual determination of the productivity in all phases as well as the quality level of health and illness care based upon an assay of solo practice, small to medium group practice (fee for service) as compared to closed panel and hospital based conglomerate practice (salary by check of financed type).

*This was considered by the Planning Council as a task too costly for the Society to consider. It might be an area for a grant to the Foundation.

III Plans for the relationship of the medical profession with hospitals and hospital groups, especially trustees:

- A. Trustees, membership for staff M.D.'s.
- B. Hospital-based medical practices.
- C. Contract emergency room coverage.
- D. Paid Chiefs.

IV Consideration of practice trends in tomorrow

- A. Solo practice,
- B. Medically defined group practice
- C. Governmentally defined group practice
- D. The "campus" theory of group practice.

V Projections regarding relationship with voluntary prepaid health insurers—the Blues and the companies.

3. Planning in the Functional Structure of the Society

Consideration of internal MSSNC planning for medium and longer range staff and environmental (physical plant) elements:

A. Establish a very definite plan for the relationship of the headquarters staff, its Executive Director, the Executive Council and the elected officers of the Society. This could be subdivided into several categories. First, it should provide a clear definition of the responsibility and the authority of the elected officers and the responsibility and authority of the staff of the Society.

B. A projection should be made as to the current and reasonably foreseeable future personnel needs of the Society for slots in the headquarters office (people or staffing).

C. The physical plant of the new facility itself

- (a) Include planning now to take care of possible later needs, for expansion,

- (b) Wisdom of the concept of a quasi-Ministry of Health—allied and associated organizations under one roof or in one complex?

D. In the area of a headquarters facility, long or short range planning by this group emphasized only one particular element, that element being the need for built-in provisions in the original plans for a substructure which will permit expansion of the facility when such become necessary, or plans whereby additions could be made. Thus we urge the Society to insist upon planning for the headquarters facility to encompass either the high-rise conception, or the horizontal expansion conception and that this planning must be done at this time and not have it called to our attention in the future that we did not insist upon it in the early stages of the development of our headquarters facility.

This is a recommendation to the House of Delegates by way of the Executive Council.

E. The relationship of the Foundation of the Medical Society of the State of North Carolina to the Society itself as this pertains to the physical plant.

SUMMATION OF THE ATTITUDES OF THIS PLANNING COUNCIL

We must give of the wisdom of the planning group wholeheartedly and without thoughts of individual aggrandizement to the Society in planning of a general nature. This could refer to fiscal, headquarters facility, committee and council structures, administrative staffing, relationship to key legislators and to the legislative bodies both state and national and other avenues.

We have established that the Medical Society of the State of North Carolina must adopt a positive posture and role in all the matters of medical import today.

No longer can we adopt a negativistic or a passive attitude. (Trite! Yes, Mister Editor, but it still ain't tripe! Just a personal comment.)

A multitude of inputs have gone into our collective approach to the areas of concern which we discussed.

The content of this report represents information gathered by a number of individuals who are serving

on many medical and health related bodies on a state and national level, and, as such, represents our best judgment on the subjects discussed as of this moment in time. We will not burden you with the details of what went before the observations, but we will assure you that mature and educated judgments have gone into the formulation.

1. We feel that this Medical Society of the State of North Carolina should be more involved and view without prejudice, but with an excited interest, the development of additional types and numbers of paramedical personnel and that this Society should engage in the active achievement of standards, curriculae development and curriculum delivery and, finally, in the specifics of the finer points of the training of new forms of paramedical people. We do not speak here of the existing paramedics such as nurses, technicians, laboratory technologists and the categories that are known to us now, but we speak of the so-called "new breeds."

2. The Society shall effectively engage in formulations which involve medical practice patterns to the end that optimum delivery of care is available for as many people as is possible.

3. We think that medicine has the responsibility, shall and should assume the full guiding responsibility for the total delivery of illness care and health care services. This we have called the apex of the pyramid concept.

4. The Planning Council engaged in the consideration of the step pattern of illness care management. This is applicable either in the sparsely settled areas, or in the crowded and thus isolated metropolitan regions which are called, inaccurately so, ghetto segments. Such a pattern can be diagrammed as a series of nested rings. At the outermost perimeter ring is the health aide; then the physician of first contact; with his or her meditechs expanding his outreach. Ideally, this ring would be made up of four to nine M.D.'s of the generalist type operating closely or loosely on a clinic basis, even as solo practitioners in loose association. Here, the great majority of medical complaints could be well and quite adequately managed. This concept might offer the opportunity of attracting physicians who are well trained, who are young, to those areas which are in the shortage category as far as physicians are concerned in North Carolina.

There are further considerations of the ring concept which may be developed in a later report.

5. Plan with reference to a realignment of the committee and commission structure within the Society to the end that the structure is more functional and that it definitely channels policy and procedure through specific avenues to the proper decision points where policy is made and that policy decisions not involving Constitution and By-Law statements be recorded in a separate document and reviewed and brought up-to-date annually by an appropriate body.

6. This Society should begin now with planning that will require evidence of continuing education on the part of every and all physicians in this State. This could be done either on the basis of a requirement for

membership in the State or component societies, or as a requirement of periodic re-registration of licensure. We must look forward to the day when the Medical Society of the State of North Carolina demands evidence of freshening and continuing postgraduate education for all doctors of medicine in this State, as well as for certain echelons of the paramedics.

CONCLUSION:

This Council commends to the Executive Council consideration of Items 1 through 6 in the "Summation of the Attitudes of the Planning Council," plus Item I under "Sectors of Involvement," and Item D under "Planning in the Functional Structure of the Society."

The now retiring Chairman of this Council expresses his appreciation to each of the Council members, whose names are listed below, for their contributions to this PRELIMINARY effort in planning for our Society.

For the Planning Council, Frank W. Jones, M.D.

Members of the Council on Planning:

Lenox D. Baker, M.D., Amos N. Johnson, M.D., Frank W. Jones, M.D., Chairman; John R. Kernodle, M.D., Donald B. Koonce, M.D., Zack D. Owen, M.D., George W. Paschal, Jr., M.D., John C. Reece, M.D., John S. Rhodes, M.D., Edward W. Schoenheit, M.D.

Ex Officio Members:

David G. Welton, M.D., Edgar T. Beddingfield, Jr., M.D., Robert A. Ross, M.D., Charles W. Styron, M.D. and Mr. James T. Barnes.

There was not a formal action taken on the report other than the President and Chairman of the Council on Planning conclude the proper sections of the report to be referred for consideration of the House of Delegates.

Dr. D. A. McLaurin of the Public Service Commission was recognized and presented the following policy statement, entitled, "The Role of the Physician in Suicide Prevention".

Problem

A suicidal death stigmatizes not only the immediate family, but neighbors, friends and co-workers and an entire community shares traumatic feelings of remorse, guilt and sorrow. Statistics indicate that approximately 25,000 persons are known suicides each year. However, experts in suicidology believe that probably two or three times that number would be classified as suicides if all the facts were known. Suicide is ranked as tenth leading cause of death in the United States and according to World Health Organization, suicide ranks fourth as a cause of death between the ages of 15 and 45. It ranks third as the cause of death among teenagers, second among college students. A less known fact is that the number of suicides is approximately three times the number of homicides each year. Suicide occurs at all social and economic levels, but occurs most frequently among white males.

There are many misconceptions and taboos concerning suicide, the most common being that a person who threatens to take his life will not do it. Another is that a suicidal person must be insane, or that a suicidal person remains so for the rest of his life. In fact, most suicidal persons indicate their intention in

some way, usually they are not insane in the legal sense and though the suicidal crisis is an urgent one, it is generally temporary.

Recognition

Physicians, in evaluating suicide potential in their patients, must differentiate between (1) the depressions, of varying severity, which constitute a very high risk group; (2) the character disorders (i.e., hysterical-sociopathic-manipulative type) who are apt to threaten and/or attempt suicide frequently, and (3) those who have elements of both categories and may be seeking help directly or indirectly (the "cry for help"). Evaluation is especially important when dealing with alcoholics and when prescribing drugs. Many patients commit suicide by taking an overdose of prescribed drugs and a large percentage of suicide attempts are made by ingesting drugs.

It becomes vitally important for relatives, friends, clergy and others, close to a depressed person, to be fully alerted to the danger of suicide, for the responsibility of obtaining professional help falls to them. Physicians must be increasingly aware of the high risk groups, which include the professions and white collar groups. Physicians, lawyers, dentists, ministers, executives—all with considerable responsibility—are especially vulnerable. Alcoholics and divorced persons, as well as women in the menopausal age, are high risks and the danger of suicide in both men and women increases sharply with advancing age. Suicide among the young is increasing, especially in college students.

Recommendation

1. Physicians have a major responsibility in recognizing and evaluating suicide potential, exercising caution in prescribing drugs and alerting relatives and other responsible individuals to the possible danger of suicide in a patient.

2. Appropriate follow-up of patients identified as suicidal should be developed in the community. Suicide attempters are known to repeat these acts.

3. Physicians should cooperate with police or medical examiners in equivocal cases so that correct conclusions can be reached. Many suicides are classified as accidents because the facts are not known to the police. Police should be encouraged to consult freely with physicians in problem cases.

4. Community services for suicide prevention should be established where possible as part of the comprehensive mental health plan for the entire community. Ideally, these services would operate within on-going 24-hour emergency services in a hospital or community mental health center.

5. Suicide prevention is a community responsibility and physicians must provide the leadership in development of community education programs in suicide prevention.

6. Key people, including public health nurses, ministers, social service agencies, teachers, law enforcement bodies, etcetera, must also be involved. Community education programs should be developed as part of the total mental health education program in the community.

Prepared by the Mental Health Committee, ad hoc

Committee on Suicide Prevention of the Medical Society of the State of North Carolina.

On motion, duly seconded and carried, the printing and distribution of the statement recommended by the Committee on Mental Health was approved and authorized.

Dr. McLaurin further presented two recommendations of the Committee on Mental Health (1) that there be a determination of Mental Health Education needs as expressed by the practicing physicians in North Carolina and (2) a feasibility study of a Mental Health Education Coordinator, preferably placed in the State Medical Society Headquarters. On motion, duly seconded and carried, the recommendations were referred to the Committee on Education of the Society.

Dr. Marvin Lymberis of the Advisory and Study Commission was recognized and reported on action request from the Committee on Nursing that the Society arrange an annual gubernatorial proclamation of a "Nurse Recognition Month" and that such had been provided in an enactment May 12, 1969 of the N. C. General Assembly. He further referred to the Committee recommendation that the following AMA Resolution Number 26 be placed on the House of Delegates agenda for consideration and action.

WHEREAS, the acute shortage of trained nursing personnel throughout the country has posed a serious problem in patient care in our hospitals; and,

WHEREAS, many nursing schools have been closed in recent years, because hospitals can no longer afford the heavy costs of nursing education thus compounding the paucity of trained nurses; and,

WHEREAS, at the present time, there is no unified academic program for training nursing personnel; and,

WHEREAS, the licensed practical nurse, the two year associate degree nurse trained in our community colleges, the three year diploma nurse trained in our hospital nursing schools, and the four year baccalaureate university degree nurse are all separate entities and do not complement each other academically; and,

WHEREAS, recent legislation (H. R. 157-57, the Manpower Training Act of 1968) has been passed by Congress this act providing a subsidy to financially distressed nursing schools and is obviously intended to alleviate the stress on hospital finances and provide more trained nurses; therefore, be it,

RESOLVED, that the American Medical Association urge increased subsidies to hospital nursing schools; and, be it further,

RESOLVED, that state and county medical societies be encouraged to study the problems relating to nursing education and to seek at the local level all available sources of financial support for hospital nursing schools; and, be it further,

RESOLVED, that the American Medical Association take appropriate action in consultation with professional nursing associations and the American Hospital Association to encourage increasing enrollment in diploma schools.

On motion, duly seconded and carried, AMA Resolution 26 was endorsed by the Executive Council and ordered placed on the agenda of the House of Delegates.

Commissioner Philip Naumoff reported for the Committee on Public Relations a recommended \$450 additional State Fair Booth expenses for 1969 related to changed policy of Fair administrators relative to space charge and displays gate admissions. On motion made, seconded and carried, the additional expense was authorized for 1969.

A discussion ensued on Senate Bill 578 (ostensibly introduced for the N. C. Industrial Commission) proposing to amend GS 97-26 providing medical charge allowances based on "reasonable charges as prevail in the State of North Carolina as a whole." This is without reference to "usual, customary and reasonable" charges as promulgated in the policy of the Society. A companion bill sponsored by the N. C. Hospital Association would provide "payment equal to but not more than the amount customarily charged by the provider of . . . medical or hospital service to paying patients." There was technical opposition expressed to both bills. Motion was made to oppose both bills as introduced, excepting the Hospital Association bill if amended to "provide payment for physicians' services at usual, customary and reasonable rates and with an inclusion of the definition of these terms as promulgated by the American Medical Association." The motion was seconded and upon vote carried.

A request from Mr. William D. Stanhope of Durham, President of the American Association of Physicians Assistants, that the Medical Society of the State of North Carolina agree to act as official sponsor for this organization was presented. The presentation included a reading of the Physician Assistant Code of Ethics. Motion was made and seconded that the Medical Society of the State of North Carolina go on record as sponsoring the American Association of Physicians Assistants. Discussion ensued. A motion to table, duly seconded, on vote carried.

A question of interpretation of the Constitution and By-Laws arose as to whether a Vice Councilor, by virtue of his office and independent of his service for the Councilor in absence, was an authorized delegate and empower with a vote in the House of Delegates even in the presence of the Councilor. A motion was made that, according to custom, the Vice Councilors not be seated as voting members of the House of Delegates tomorrow and Tuesday (May 18 and 20, 1969) and that the Committee on Constitution and By-Laws bring a recommendation to the Executive Council at their earliest convenience to change the Constitution and By-Laws so as to clarify the matter. The motion was duly seconded and on vote carried.

The requests from the State President of the Student American Medical Association was presented (a) seeking permission of members of each North Carolina Chapter of the three Medical Schools to sit and engage in discussions in meetings of the Society Committee on AMERF, Public Relations, Community Health, Federal Health Programs in Development, Relative Value Scale Study and Pharmacy and (b) that the N. C. Board of Medical Examiners consider changes in setting the times of the State Board examination, nor internship interviews or starting internships when scheduled Mid-

June. Present provision of the By-Laws for student membership, and thereby access to Society participation, was referred to as adequate to the first request and the incoming President's interest in specifically involving student representation in Society functions was cited. The Board of Medical Examiners could take care of the second request and had it under consideration.

President-Elect Beddingfield presented an informal report relative to Medical Society efforts through the Committee Advisory to the Motor Vehicles Department in participating in the screening of the suitability of driver license applicants for driver licensing a joint enterprise of some duration with the Society and Department of Motor Vehicles, which by legislative enactment in 1967 involved the State Board of Health in the mechanisms of the screening process and a legally established appeal board, making it a tripartite arrangement. This had caused the Committee some concern at the outset, but via three statewide conferences of the groups had become resolved into a workable situation. No action was considered necessary.

President Welton recognized Dr. Frank W. Jones who related to the Executive Council the Composition and purposes of a Joint Conference Committee on Medical Care involving Society representatives and other medical delivery group representatives. No action was indicated.

The legislative counsel was authorized to seek a solution to matter of medical representation on official agencies whereas they are by duty required to serve patients under some aspects of conflict.

A general discussion ensued as to the availability of group insurance for all descript people functioning officially for the Medical Society related to accident coverage. President Welton was authorized to work with Mr. Barnes listing persons, duration of function and frequency of functioning of individuals for the Society to be submitted to an insurer for estimates of premium costs and to report again to the Executive Council.

On motion made, and duly seconded the following were nominated for consideration as Directors of the North Carolina MEDPAC Board:

John S. Rhodes, M.D., Kenneth Cosgrove, M.D., George W. Paschal, Jr., M.D., Ledyard DeCamp, M.D., Jack Hughes, M.D., Paul Deaton, M.D., Frank W. Jones, M.D., Donald B. Koonce, M.D., Hubert M. Poteat, Jr., M.D., Thomas Thurston, M.D., Edward Bond, M.D., Charles D. Blanton, Jr., Pharmacist, William F. Hollister, M.D., John Weyher, Jr., M.D., Mrs. Torben Seear, Auxiliary, Mrs. Betty McCain, Auxiliary, Mr. W. J. Smith, Pharmacists, Robert Moffat, M.D., and John Cheek, Jr., M.D.

On motion made, seconded, and carried the Executive Council elected said nominated slate as the Directors of the North Carolina MEDPAC Board.

President Welton signified this as the last meeting of the Executive Council under his chairmanship and thanked everyone for the frequent, faithful and fruitful endeavor and for the privilege of working with the group in his capacity of President.

The Executive Council adjourned at six-five o'clock P.M.

Respectfully, James T. Barnes

Executive Council

The Executive Council of the Medical Society of the State of North Carolina met on special emergency session, 6:20 o'clock P.M., April 10, 1969 at the Velvet Cloak Motel, Raleigh, North Carolina, President David G. Welton presiding. Invocation was rendered by Dr. John Glasson. Secretary Charles Styron called the roll and declared a quorum present.

President Welton reviewed certain communications to the Society beginning on March 28, 1969 from officials of the Bureau of Health Insurance of the Federal Social Security Administration indicative of the emergent problem of the Pilot Life Insurance Company having resigned as the carrier for Part "B" of Medicare in North Carolina. He explained the tenor of these communications to the point that Pilot decisions were final; that the Bureau of Health Insurance of SSA would entertain recommendation of the Medical Society relative to the Bureau selection of a successor carrier for North Carolina; that no domestic commercial insurance company in North Carolina appeared eligible as a successor; that the SSA was satisfied with the mix as to commercial and voluntary agencies serving as carriers in the country; that ultimate decision in the matter rested with HEW Secretary Robert Finch; that among present national carriers the Prudential Insurance Company of New Jersey was a proven satisfactory carrier in that state and had expressed an interest in being selected as carrier for North Carolina; and that North Carolina Blue Cross-Blue Shield, Inc., had expressed to the Medical Society its interest and availability as a carrier for Part "B" of Medicare only should the Society request that it offer its services as a carrier. Moreover, President Welton reported the expressed satisfaction of the Medical Society of New Jersey with Prudential as the original and present carrier for Part "B" of Medicare for New Jersey.

Discussion ensued indicating three-fourths of states have Blue Shield carrier of Part "B", whereas, Blue Cross was nationwide carrier for Part "A" of Medicare and approximately 150 commercial carriers are engaged as carriers for Part "B"; that in states where carriers administer both Part "B" of Medicare and Medicaid, expenses of administration was less and that carriers for the respective systems were intimately related; that the B.H.I. computer system established in Greensboro was transposable to whatever carrier was selected; that Pilot had expressed willingness to cooperate their facilities and personnel in the transitions of carriers; that the computer establishment in Greensboro is relatively accomplished and the software aspects, if not the hardware, was readily transposable to the use of a succeeding carrier; that Equitable Insurance Company had informally conveyed interest and a helpful disposition; and that decision in the matter might be based on what ultimately would please a greater number of the phy-

sician members, many being pleased with the current aspects of carrier administration.

Motion was made, and duly seconded, that the Executive Council recommend to the Social Security Administration that the Part "B" Program of Medicare be conducted in the State of North Carolina by a commercial carrier. The motion was opened for discussion.

Discussion ensued pro and con relative to the divers merits of a commercial carrier as against the Blue as carrier. The Chair interpreted that the Council had advantage of a full, frank and friendly discussion and put the question of the motion above. Upon roll call vote there were 5 in favor, 7 opposed and one abstained. The Chair declared the motion failed to pass.

A motion was made that the Executive Council go on record as commending Pilot Life Insurance Company and expressing appreciation for what they have done for the Medicare program in our State and that the Society express regret that the Company has resigned as carrier. The motion was duly seconded and upon vote the motion carried unanimously.

A motion was made that the Executive Council go on record as favoring North Carolina Blue Cross-Blue Shield, Incorporated, to act as carrier for Part "B" of Medicare. The motion was seconded and discussion called for. There being no discussion a standing vote was taken the result being nine to three favoring the motion.

On further motion the Executive Council adjourned.

PRESIDENT'S DINNER

May 20, 1969

The Banquet Session for the President's Dinner of the Medical Society of the State of North Carolina convened at eight-ten o'clock in the Main Dining Room of The Carolina Hotel, Pinehurst, North Carolina, Dr. John R. Kernodle, Master of Ceremonies, presiding.

CHAIRMAN KERNODLE: Ladies and Gentlemen:

Being Toastmaster tonight for my good and faithful friend, President David Welton, is indeed an honor.

Speaking of Dave, while at Wisconsin, he started student unrest and "sit downs" in reverse. While there, the faculty locked him in the laboratory for starting SDS—this meaning, "Scholars Deserve Scabies;" later changed to "Scratch, dammit, scratch!" [Laughter]

His energy is unbounding. In one year, as President, he established a Section on Dermatology and his address was "Seven Year Itch—How to Scratch it out in Five!" [Laughter]

His ability as a pianist is well known as he plays in the Rotary and in other groups that will sit still! [Laughter] In fact, Art Jones complained because he repeatedly plays, "There's a ringworm 'round my shoulder" and I believe he learned the "scales" from psoriasis! [Laughter]

He also set a record in the number of called meetings of the Executive Council and the House of Delegates during 1969 and someone said it was practically

a world record, but nevertheless, Dave has done a terrific job and we're proud of him.

(At this interval guests were introduced.)

[Applause]

Thank you.

CHAIRMAN KERNODLE: Dr. Jones, I understand you have a little task. Will you come forward, please?

DR. FRANK W. JONES: Mr. Toastmaster, Dr. Welton, Dr. Beddingfield; My Friends, of course:

You know, every time someone writes a speech for one of these things, he steals your thunder.

I had a lot of things to say tonight, but after John Robert's delivery tonight—

He sort of foreshorned it, so I've already had to make some changes, so I think I'll change it again.

Tonight, we meet again for an honored occasion.

It is known that this function has been a part of the proceedings of this Society for all One Hundred and Fifteen years. Probably it had its origin even earlier than that initial meeting in 1799.

This, the occasion of the annual banquet and the President's Ball.

Tonight, there is a changing of the guard. Tomorrow, there will be a new President of the Society.

It is meant that we honor tonight this man who has carried the banner of our Medical Society so valiantly, so skillfully and so forcefully through this year of critical, continuing peaks. Understand, carefully, I did not use the word "crises"!

He has led medicine in this State honorably, in the pursuit of the goal to which we have dedicated our lives—the health and the well-being of our people.

It is proper that we approach the presentation of the President's Jewel with dignity, love and honor. However, it is equally proper that there be an admixture of lightness.

Our distinguished President came to the land of North Carolina thirty years ago from the State of Wisconsin. During these years, he has served medicine the art, medicine the science, and medicine in the administrative wings of the temple of Aesculapius well and faithfully.

He has been President of Mecklenburg Medical Society; Chairman of the State Committee on Public Relations; Commissioner of the State Society; Councilor of the Seventh District; First Vice President of this Society; and, numerous other important posts.

He moved along through the files and the ranks into the top honor that the physicians of North Carolina give; this honor being the presidency of this august body.

We came tonight not to bury David, but to praise him! [Laughter]

And, to warn him that we shall continue to use his talents, for David Goe's Welton along! [Laughter]

Tonight, we have a part of his family, two of his sons, Scott and Rex and their wives; a third son Sandy and a daughter Shelly were unable to attend.

With five grandchildren, our man now has his seat back, as our farmer friends would say.

In honor of our retiring President and his musical

talents, I, Frank Jones, have composed a posy called, "The Ballad of David Goe."

This ballad told about how he came from the land of the cheese, toting that awkward object, that totally awkward object, the baby grand!

It spoke of his prowess in many fields. It recounted the time when he slew the Goliath of HEW with words of telegram—his name was Cohen! [Laughter]

Mention was made of the words of Historian Barnes down at the end of the table, regarding the records he had set for the number of meetings of the Council and the House. It is totally understood that possibly this may never be equalled in our Society again.

[Single applause from the audience] [Laughter]

Certain developments, chief among which was the musical presentation at the MEDPAC banquet last night, caused me to tear up this ballad, over which I have labored so hard and to return the banjo which was out of tune.

Today, I was forced to redo what I intended to say and now, after John Robert, I think I should have redone what I did say tonight!

Incidentally, this ballad was modeled a little bit on the time-honored Sir Walter Scott's "Lochinvar"—"For David Goe's Welton Along"! [Laughter]

While scouting about for material for this presentation, I asked his family for some amusing vignettes and embarrassing circumstances that I might surprise my friend, David, with.

In answer I received a statement that says about the same thing we could say about David. This statement was this, and I quote:

Sorry! I do not have much to offer you because Dad has simply not made many faux pas.

Dave, with this we will agree and now, will you stand up, please, sir?

[Whereupon President Welton stood by the side of Dr. Jones for the presentation.]

I now welcome you, David Goe Welton, to that "Society of Mr. Was"!

For this, I am indebted to my friend, Henry Cutchin, for the coining of the term.

I present you now with the President's Jewel which I hope you will wear when you have the proper place in your buttonhole to put it—[laughter] When you don't, I hope you will carry it near your heart as a token of our appreciation and our esteem because David, you have been a wonderful President. We're all appreciative of what you have done for all of us and thank you, so very much, for being you!

[Whereupon Dr. Jones then presented the President's Jewel to President Welton.] [Applause]

PRESIDENT WELTON: Thank you, very very much, Frank.

As "Daddy" Ross says, this is the time when the quip does not come easily, and no man has an occasion exactly like this in his lifetime and it has been my good fortune to have the privilege of working with an extraordinarily fine group of men this past year and have had good tutelage, internship and residency

under Frank Jones and "Daddy" Ross and some of their predecessors.

I want to thank each one of you for the privilege of serving in this capacity.

[Applause]

CHAIRMAN KERNODLE: President Dave, will you form a little task force now, please?

PRESIDENT WELTON: Yes, I'll be happy to.

It's my turn now!

I've read up a little bit about my reply to our incoming President and his family supplied me with a description about Dr. Beddingfield.

He was born too late for the Lost Generation, too soon for the Beatnik Generation, but just right for the Legislative Generation! [Laughter]

Will you come forward, Ed?

[Whereupon President-elect Beddingfield then stood by the side of President Welton for Installation.]

It is my pleasure now to administer the Oath of Office to our incoming President. Will you please repeat after me:

[Whereupon President-elect Beddingfield recited the Oath of Office:]

Congratulations, Mr. President!

PRESIDENT BEDDINGFIELD: Thank you, Dave.

[Whereupon the entire assemblage then accorded newly elected President Beddingfield a standing ovation.]

Mr. Toastmaster, Mr. Past President, Fellow Officers, Members of the Society, Guests, Ladies and Gentlemen:

In May of 1959, when my good friend, Dr. John Reece was installed as President of this Society at its One Hundred and Fifth Annual Session, Dr. Reece was introduced as the first man ever to ascend to the presidency prior to his menopause! [Laughter]

Although I confess that there have been moments when I had my doubts, I want to inform you tonight that I am the second member of this select group! [Laughter]

Being number two, I'll try harder! [Laughter]

I have a rather specific mandate in regard to the length and the content of my remarks in these few words of acceptance.

In the official records of this Society, on page 235, Transactions of the Executive Council, September 29, 1968, Dr. Styron, our beloved Constitutional Secretary, in reporting the recommendations of the Annual Convention Committee, is on record as follows:

It is strongly recommended that the President's words in acceptance upon installation be changed from an address to a three minute—repeat three minute—statement. The President has an opportunity to speak in detail the following day.

[Laughter]

Dr. Styron, I shall heed this mandate and I will restrain myself until tomorrow morning, at which time I will discuss with you in some detail some of my thoughts about the Society, about health care in general, and certain goals and ideas of my administration in which I solicit and need your understanding, support and active help.

Assuming the Presidency of this Society is a singular honor which does not come to many of us. You do me great honor and simultaneously impose upon me, acting as your executive officer and chief spokesman, a challenge and a weighty responsibility.

In short, I am aware that this office is not only a distinct honor, but more importantly, a working job.

I accept this challenge and the responsibility.

In order that I might dedicate myself sufficiently to the task, adjustments in my personal and professional life will obviously be necessary. This is not difficult for me personally because my interest and my enthusiasm for participation in the Medical Society affairs is a matter of record and for years has constituted an important part of my life.

The sacrifices involved will evolve more importantly and more directly upon my wife, Lorraine, and my children, my professional colleagues in Wilson and most importantly, my eighteen partners in the Wilson Clinic, the Wilson Clinic staff including my office nurse, Mrs. Yelverton whom you've met, and of course, upon my patients.

All of these people who will be deeply affected by my new responsibility have been consulted and have pledged their support in my endeavors. They have made it possible for me to accept this honor which you bestow.

For my own part, I pledge to you my time, my interest, my energies, and whatever talents and abilities I might possess.

I invite communications, suggestions, advice, healthy dissent and offers of help from all of you in the issues which confront us. So, keep those cards and letters coming in, folks! [Laughter]

Finally, I shall work for a year of progress in medicine here in North Carolina.

Again, you do me high honor, for which I am very grateful.

Thank you so much.

[Whereupon the entire assemblage then accorded President Beddingfield a standing ovation.]

MR. EDGAR BEDDINGFIELD, III, Daddy, from us three children and also from mother, I'd like to give you this gift to show you how proud we all are of you and for how much we love you.

[Whereupon Mr. Beddingfield, III, then presented his gift to President Beddingfield.] [Applause]

PAST PRESIDENT WELTON: It would be impossible for any of the officers, the President and the rest and the Council, to function without the staff in our headquarters office and seated at a table to my left, I'd like to recognize first, Mr. Bill Hilliard and Margaret Hilliard; our Assistant Executive Director and Bill, would you present the other members. [The staff was recognized.]

Many of you were not at the House of Delegates meeting this afternoon. Donald Koonce completed his ninth year as Speaker of our House of Delegates and he has served on the Executive Council in some capacity for something like twenty-one out of the last twenty-three years.

This is a most remarkable record. We had wanted

to express our gratitude and appreciation to Donald on his wonderful service on as many occasions as possible and if he's present, we'd like him to stand.

[No response]

Otherwise, we will ask all of you who see him to carry this message to him. Thank you.

CHAIRMAN KERNODLE: I got a telegram a moment ago. It slipped my mind, so let's see what it says.

It says:

OFFICERS AND DELEGATES OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.

DEAR JOHN:

URGENT CALL FOR THE MEETING OF THE HOUSE OF DELEGATES AT FIVE MINUTES OF NINE.

(Signed) DAVID G. WELTON, PRESIDENT, MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.

[Laughter]

Unfortunately, Dave, you are not in office anymore! [Laughter] I'm glad I didn't open this any sooner!

So, we will adjourn to the Cardinal Ballroom for entertainment, at once.

Before we go, let's give Donald Koonce a round of applause.

[Whereupon the entire assemblage then accorded Dr. Donald B. Koonce, Retiring Speaker of the House of Delegates, a rousing vote of thanks.]

[The meeting adjourned at eight-fifty-five o'clock.]

Meetings of the House of Delegates

The Special Called Meeting of the House of Delegates of the Medical Society of the State of North Carolina convened at 10:00 o'clock Sunday morning, November 10, 1968, in the Virginia Dare Ballroom. Dr. Donald B. Koonce, Speaker of the House, presiding.

PRESIDENT DAVID G. WELTON: The meeting will come to order, please. I now declare the House of Delegates of the Medical Society of the State of North Carolina to be in official session, November 10, 1968. We ask our first vice president, Dr. John Glasson, to give the invocation. You may remain seated.

DR. JOHN GLASSON rendered the invocation.

PRESIDENT WELTON: We will have some announcements by our secretary Dr. Charles W. Styron.

SECRETARY CHARLES W. STYRON: Mr. President, it is necessary to know the number who are going to be here for the luncheon so that those of you who plan on being here for the luncheon please buy your luncheon tickets promptly.

The headquarters facility will be open from 12 until 1:30 and you are invited to visit the headquarters facility if you feel you have time.

You have a packet before you which contains an agenda, the Forsyth petition, a brief history of headquarters facility project and two papers, one on financing a headquarters building and why a headquarters building.

There is a projection machine here on which you may write if you have any figures to present to the House of Delegates.

PRESIDENT WELTON: Thank you very much, Dr. Styron. The Chair will now recognize the Speaker of the House, Dr. Donald Koonce.

SPEAKER OF THE HOUSE DR. DONALD B. KOONCE: I know it's quite a sacrifice for a great many of you to be here. I can assure you it is a sacrifice for me to be here, but also a pleasure.

Not long ago you all received a call for this special called meeting of the House of Delegates in which it was stated that this meeting was called for the purpose of reconsideration of the method of provid-

ing for and financing adequate space for headquarters facilities and consideration of any other matters specifically related thereto.

Now according to Roberts Rules of Order which we go by, no other matters can be discussed at a called meeting except those which are contained in the call. Therefore, please when we start discussing, confine your discussion and your action to these pertinent matters.

I would like for your information, to read to you some of the actions of the House of Delegates which are pertinent to today.

First of all, in May of 1967, the Reference Committee chaired by Dr. Lymberis made one recommendation. The Executive Committee directs the President to appoint a committee to obtain an in depth study of the building need of the headquarters facility of the Medical Society of the State of North Carolina and the best utilization of the recently purchased land before commissioning an architect for plans. The committee is to utilize consultants and expert planners and to conduct the on-site inspection and other headquarters facilities. Reasonable expenditures not to exceed the amount previously allocated to the committee on headquarters facilities and planning is authorized.

This report is to be completed by January 31, 1968. Progress reports are to be communicated to the Executive Committee at its regular meetings. Then in May of 1968, several actions were taken pertinent to this matter. The Reference Committee chaired by Dr. Glasson, as regards to motion C-1 of the Executive Council, the Reference Committee number one approves a revised motion substituting for motion C-1 of the Executive Council as follows: "That the Committee Headquarters Facility is authorized to acquire an additional 10,000 square feet if possible plot of land adjacent to the property in Central Raleigh which has been acquired for the construction of the Headquarters Facilities." That was just authorizing something which had really already been done.

Next, "I move," this is still Dr. Glasson, Mr.

Speaker at that Reference Committee meeting. "I move to which Council that the Headquarters Facility Committee be authorized to engage the services of an architect to prepare the preliminary plans for the construction of the Headquarters Building.

"I move that this Council recommend to the House of Delegates that the Society be authorized to borrow a sum of money not to exceed \$750,000 for the purpose of constructing the headquarters building upon such terms and conditions and amount as may be approved by the Executive Council."

Again, Dr. Glasson. "That the Finance Committee of the Society after consultation with the Committee on Headquarters Facility be requested and authorized to investigate and recommend to the Executive Council methods or means for obtaining the funds necessary for the construction of the Headquarters building."

Next and still Dr. Glasson from his Reference Committee: "I move that the Executive Council recommend that the House of Delegates authorize the construction of a Headquarters building on the site owned by the Society in Raleigh, North Carolina according to such plans and arrangements and at such times as shall be approved by the Executive Council."

Then at a later time in that last session a recommendation by the then president, Dr. R. A. Ross. "The Executive Committee recommends that the House of Delegates increase annual dues of the members of the Society by an additional amount of \$60 per year for a period of five years beginning with the year 1969 and beginning with the first year of admission of members admitted to membership during and after 1969. All members shall have the option of paying \$250 in January of 1969 or on the first year of their admission thereafter in pre-payment foregoing additional increase in their dues. These additional funds are to be used for the purpose of construction and maintenance of the headquarters facility."

All of these actions were duly voted on and duly passed at that time. As to the call for this meeting, Dr. Welton will tell you more about that in a few more minutes. But those are the actions which have been taken and have been passed. The call states "For reconsideration." Now for a few little parliamentary explanations. Reconsideration of an action taken at a previous meeting cannot be called for. A motion to reconsider which is very logical because if you called for a motion to reconsider any one of these things which has been passed you would just be coming back to discuss that motion and vote on it again. That's pretty practical and that's the way it is in Roberts Rules. The action which can be taken is to rescind which will open up the floor for new motions. The only two motions which would be pertinent to this floor as of the present time, not later in the meeting, but as of the present time would be a reaffirmation, which I question that you want, or rescind.

Now it is perfectly proper to consider informally, very informal consideration of any subject that the

House so wishes. It is perfectly proper for the Speaker to call for informal consideration without a motion on the floor unless there is objection from the floor. If there is objection from the floor, when we get to that, the Speaker will call for a vote.

My idea, and you can take it or change it, my idea is that it would be wiser for all of us if we had informal consideration, even if it takes all the morning, which will give all of us a chance to hear the various and sundry sides without any motion on the floor with the request that motions be held until we have adequate informal discussion and then you can make the motion if you want to.

Now, however, the assembly has a right to make a motion when they see fit. If one of you don't want to listen to all of this information discussion, you can call at any time for a motion to rescind and we will have to recognize it, if you have a second, and call for the vote.

However, I think you will agree with me that it would be wiser to have an informal discussion without any motion on the floor until we are fully aware of what we are talking about and a lot of your questions will be answered as I know a lot of mine will be. Frankly, I am a little bit confused about the whole thing myself and I as an individual, not standing up here, an individual member of this House of Delegates, would like to hear the things that I know are coming up this morning.

So, with your permission, that is more or less the format we will proceed with unless I hear objections at a later time. And now, Dr. Welton will give you some remarks that he has about actions which have been taken since our last meeting.

PRESIDENT WELTON: Thank you very much, Dr. Koonce. Those of you who have not discovered it will find the list of actions which Dr. Koonce just read to you on page two of the brief history of the Headquarters Facility project in the packet of information at your place. They are all enumerated there if you wish to refer to the specific wording of them.

I would like to take you back for a moment to Tuesday evening, May 14, 1968, at which time it was my great privilege and honor to be sworn in as President of the Medical Society of the State of North Carolina. And I made a remark referring to the actions taken by the House that afternoon. My remark was that Dr. Ross was going out of office with a royal flush that would probably be heard from Murphy to Manteo. I didn't realize how prophetic that remark was.

On the President's page of our Journal in June I reported that some objections had been heard to the recent House actions and I stated as follows: "That expressions from the members regarding Society matters, critical or otherwise, are always welcomed by the President and the other officers. Two-way communications concerning all of our Society endeavors are both necessary and desirable." I intend to strive for more effective communication by all means. I want the entire membership to be fully informed about an undertaking of such major impor-

tance as this one being considered. To that end I plan to send to every member of the Society a letter enlarging on the foregoing information.

It is my intention to set up several groups of officers, speakers including the councilors to be available to visit the County Society, present this matter and participate in discussion about it.

In addition, a paper will be prepared for publication in the Journal giving a detail account of the building project. More participation and better communication on the part of the entire membership are essential to the vitality of our Society.

On June 15, 1968, our Society employed Mr. Dan Mainer as a field representative. This is the first time we have had such a position. Mr. Mainer has been really on the job since that time functioning as a primary line of communication from the headquarters operations to the county society. He is available to help the county society in any way that we can bring help to them and to bring word from them back to us.

On June 27th I received a petition from the Forsyth County Medical Society properly signed by 70 delegates representing 35 counties. In order to save time I am not going to read this because it has also been reproduced and you have a copy of it in your packet. I am going to read the three resolutions, the three resolves that you find on page two.

Resolved, number I, "That we, the undersigned delegates representing the Forsyth County Medical Society together with other delegates whose signatures are appended hereto, all totaling forty or more delegates," a requirement of the constitution and by-laws, "do hereby petition the President of the Medical Society of the State of North Carolina to call a special meeting of the House of Delegates no later than December 1, 1968, for the purpose of reconsideration of the method of providing for and financing adequate space for a Headquarters Facility and consideration of any other matters specifically related thereto, and

"II, BE IT FURTHER RESOLVED, that we hereby request that prior to this meeting the Executive Council, the Finance Committee, the Headquarters Facility Committee and such management consultants deemed appropriate by the Council give consideration to the objections raised in paragraph 5, of the preamble to these resolutions and to alternate proposals which would remove or ameliorate such objections, and

"III, BE IT FURTHER RESOLVED, that we hereby request that specific alternate proposals, with detailed supporting data including the proposed use of the currently owned property and other assets of the Society, be distributed well in advance of the meeting to the entire membership of the Society, to the end that the membership of each component society shall have time to study the proposals and, at its option, to instruct its delegate(s) as to its wishes prior to the meeting."

As your President I report to you today that these requests have been fulfilled to the best of our ability. The Council, the Finance Committee and the Head-

quarters Facility Committee have considered each of these points. They have consulted with financial consultants, management consultants real estate consultants and we have with us in the room today the members of the Headquarters Facility Building Committee, including our consultant of Raleigh, Mr. Ford Worthy, who has a degree of MAI, Master Appraiser's Institute, which is a very high recognition of special ability in this particular field.

We have also asked one or two representatives of the bank with which the Society has done business for 22 years to be available for specific detailed questions on interest calculations, et cetera, and we expect that they will be here by 11 o'clock.

Next, I would like to report to you the call to meeting of the Executive Council which was held on August the 11th.

The Council took official recognition of the petition and approved the date of November 10th as the date for this called meeting to be held in Raleigh.

The Headquarters Facility Committee reported that at its meeting on July 14, Mr. Milton Small of Raleigh had been selected as the architect but that no contractual obligation had been consummated and none has been consummated yet.

Third, as one step in getting full information to the Society membership the Council authorized the Headquarters Facility Committee to obtain consultation and sketches from the architect at a cost not to exceed \$1000.

The Council authorized me and the Headquarters staff to see to the development and execution of our plans to provide the entire membership with comprehensive information about this project.

These plans included articles in the North Carolina Medical Journal. There have been articles virtually every month, including editorial comments. These have been reproduced. You have been sent copies in the mail individually. Personal visits to our county societies by members of the Speaker's group and an individual mailing packet which I just mentioned.

Now, in the 90 days since August 11, 1968, it has been our attempt and energetic and earnest endeavor to supply you and the rest of the membership with every bit of information that we could possibly get to you. We have used everything except television. This has required the use of the full manpower of our headquarters staff. The time and efforts of many of the officers and other knowledgeable members. You have received detailed articles on several methods of financing, on the need for the building, on what the Society does for you and in the packet a preliminary sketch of the floor plan of a building which is referred to as Plan B, of the feasibility study done by Mr. Worthy.

Most important I believe has been the person-to-person visits to the county societies. In this period of 90 days the task force of speakers have visited more than 38 meetings of county societies. The figure is probably 40. This represents more person-to-person communication on the part of your officers directly

with the county societies than the society probably has had in a number of years.

I think it has been a very healthy thing. A number of these county societies have remarked that this is the first time they had an officer of the State Society that they could remember. This remark usually came from some of the younger members but it was true in many cases for a number of years.

This is bound to improve our relationship over the long pull and I think we have succeeded in erasing some apathy which has been a recognized problem, not just in counties and states but nationally.

So we believe that the expenditure of time and effort to bring the maximum amount of information about this to the entire membership has been worthwhile.

I have considered this as my primary responsibility and objective during this period of time.

We have also sent letters to initiate this to every county society president asking him to set up these meetings. We have had reminder letters from the councilors to you delegates.

I want to take this opportunity to thank each and every member of our Headquarters staff and to thank our officers, members of the Executive Council, Executive Committee and our editor, Dr. Bob Prichard of the Journal and everybody else who has participated in this endeavor. I think this is one of the finest things we have had the opportunity to do in a long time and I trust that most of you, I hope, feel that you have received full information. We knew we couldn't rely on one method. It has been printed. It has been mailed and we have taken it person-to-person.

That concludes my remarks, Mr. Speaker, and I yield the chair to you, sir.

SPEAKER OF THE HOUSE: I certainly would be remiss if I didn't introduce to you, and he needs no introduction, your Vice-Speaker, my right hand man always, on the left, Dr. James Davis.

I will use him rather profusely now and in May.

If I hear no objection I am going to open the assembly to informal consideration of this matter. Do I hear any objection? If not, in a few seconds I am going to open the floor to informal discussion and consideration of this matter.

I would like to request that you limit your discussion as much as possible. We want this to be free and open discussion. Of course we will go into some debate. There is no specific motion to debate at present. I am quite sure that a lot of you have brought all the national proposals. I think now would be the time to present them. If you can confine yourself to five minutes, I think we all would appreciate it. If you can't, if you will call attention to the Speaker we will extend your time. But if you have all the national proposals, I think it would be very wise to present them now rather than to wait until the definitive action is on the floor or question is on the floor so that all of us can have the value of the different opinions and ideas and all the national plans which you may have.

Then the question has come up suppose we would like

to get our county society delegates together and have a caucus and discuss what kind of motion we would like to make at a later time when motions are ready. Well now, that certainly can be done. If we don't finish with our informal discussion by lunch time, of course, that would be an ideal time to caucus. If we do and you want to meet, have a recess for five or ten minutes and caucus and decide what you want to do before formal action is taken, we certainly will do it.

But please keep your remarks pertinent to the call of the meeting. The floor is now open for information consideration of the call of this meeting. When you do discuss something, please come to the microphone and for the stenographer's help, give your name and the county you represent.

Now, as Dr. Welton has said we have representatives from the various committees, the Finance Committee, the Headquarters Committee, with consultants, so that if you have any questions to ask, don't hesitate to ask them. Don't ask me. Just tell me the question you want and I will call for somebody in the audience to give you an answer.

DR. STYRON: Mr. Speaker, Members of the House of Delegates, this is not a plea for any of the items that we have under consideration but rather a very rapid resume' of the items at hand.

Now, on May 14, there were four principal items that were passed; acquiring of property, engagement of an architect, authorization to borrow \$750,000 upon approval by the Executive Council and authorization of the construction of Headquarters Facilities.

The above resolutions considered at the House of Delegates meeting in 1967 and passed in 1968 were discussed and details were available to the delegates prior to the passage of these items.

There was some discussion but little objection to the first four items. However, prior to the House of Delegates meeting on May the 14th the Council met at the instigation of certain members who wished to institute an alternate method for payment of the Headquarters Facility.

The information pertaining to this final item five, was not available to the members of the House of Delegates. The Council, however, approved this resolution and elected to present it to the House of Delegates on May the 14th and it reads briefly as follows:

"Approved and adopted the recommendation of the Executive Council that the dues of the members of the Society be increased by an additional amount of \$60 per year for a period of five years beginning with the year 1969 and beginning with the first year of admission of members admitted to membership during and after 1969. All members shall have the option of paying \$250 in January of 1969 or in the first year of their admission thereafter in prepayment of the foregoing additional increase in their dues. These additional funds are to be used for the purpose of construction and maintenance of the Headquarters Facility."

There was little discussion of item 5 by members of the House of Delegates and though the dues in-

crease was passed, many delegates had almost immediate misgivings about this resolution. And this final item 5, the additional assessment of dues is basically why we are here today.

It is the primary premise of the petition dated June 5, 1968 from Forsyth County Medical Society.

I received this letter, immediately signed it and returned it. I think there was little disagreement with the first four items which I previously mentioned. I think there were many and great misgivings about item 5, the assessment of dues. I think it is entirely appropriate that this petition was drawn up and sent and without consulting anybody whatever I signed it and returned it immediately.

This was the crux of the matter. There are many feelings about this final item and as a result of this the first four items which I mentioned have again come under consideration.

The number one item for discussion, it seems to me is the basis of the petition that was sent and I think as Dr. Welton and others have said, it is entirely appropriate that we get together and thrash it out. Thank you.

SPEAKER OF THE HOUSE: My alert Vice-Speaker has called to my attention an omission of mine. I determined that we had a quorum but I have not called for a declaration of the quorum. Will the Credentials Committee, Dr. Wilkerson, give us a report?

DR. CHARLES WILKERSON: Mr. Speaker, we have 116 certified delegates which includes 14 of the councillors (Executive Council).

SPEAKER OF THE HOUSE: A total number of the House of Delegates is 207. 104 would be a quorum which we have and therefore I declare a quorum present. Now we will proceed with the informal discussion. The floor is open.

DR. MARVIN N. LYMBERIS: (Mecklenburg) I am taking this opportunity in the form of discussion without motion in the hopes that we can expedite the business at hand. Your Speaker has carefully pointed out that the real discussion today is not if we should build a building, that is decided. How shall we pay for the building and when you cut this pie in as many pieces as you like you come down to really three alternatives of paying for any building. Short term, long term and intermediate term. And you can intermediate anything in between the shortest and the longest.

I believe that all of you would agree that five years is about as short a term as is practicable, that 20 years is considered by financial institutions as long term, particularly with today's building.

So I would like to present to you for your consideration the advantages and disadvantages of these three methods of financing.

I have prepared this very short sheet after consultation with two separate mortgage bankers.

This sheet is prepared on the premise that we could build this building with not over \$650,000 of borrowed money.

Now how was that figure arrived at? It was figured that with our land paid for, that with the

liquidation of the property which we now own on the highway and that with the dues which would come in, the increased dues in January, that we could build a building whose total cost and furnishing would be some 700 to \$750,000 without financing over \$650,000.

Now when I went to the finance men they stated that the current rate as of two weeks ago was seven and a half to seven and three-quarters percent for long term money, long term being defined as anything exceeding five years.

They further stated that the current practice would be three quarters of one percent of the principal amount as a lender's fee for construction loan and three-quarters of one percent as a lender's fee for the permanent financing or a total of one and a half percent of the principal amount. However, if short term financing were used the bank itself would most likely carry the note, not having to sell it to the long term, thereby saving three quarters of one percent of this original fee.

Whatever final figure may be necessary upwards or downwards from 650, the comparative figures will remain the same. On a five year basis, \$650,000 of borrowed money at an interest of seven and a half percent and I might add here that I believe on short term you could beat this by a half percent but to make them comparative, I have used seven and a half, would call for eleven monthly payments of \$13,026 or an annual payment of \$156,312 with only three quarters of a percent lender's fee \$4,875, it means that a grand total of your cost over five years would be \$786,435. Subtract your principal amount from that and you have a total financing cost of \$136,435.

Your next column you have the same figures for ten year financing. The total cost of your borrowing would be \$286,390.

Projecting these figures to 20 years you have a total cost of borrowing of \$617,110.

Now the real meat of this consideration is in the last two lines. The difference in the cost of borrowing money between five years and ten years is \$149,955. In other words, \$150,000 more in interest costs for an extra five years.

The difference in five years and 20 years is a cost of \$480,675.

Now this last figure divided by approximately 3300 is about \$151 per man.

Now taking these same figures, we can make some changes in what was proposed in May. A \$50 a year dues increase for five years with an alternate of \$200 stat would pay for this building.

Now I think most of us would rather put up \$200 stat or \$250 over five years and save \$151 in interest charges.

I have heard the very plausible argument why should we, the present membership take this entire burden instead of spreading it over a long time?

I think this argument has much merit but it also has some things which mitigate against it. The State Medical Society is a voluntary organization. You do not have to belong to it to practice medicine in the State of North Carolina. It serves you in many ways.

But we have had so many years of prosperity that I think except for the older men here we have come to believe that this pattern can never end. I for one do not think that it is an endless cycle. I for one am not willing to gamble the future of this State Society and what it means to medicine for a few miserable dollars in the pocket now.

Should we have adverse economic conditions. Should times become less prosperous there would be many members who would find payment of an increased dues over a long period of time a burden. You are mortgaging the assets of your Society for this building and when you can't meet these monthly payments you lose these assets.

I have heard the argument that why should the man practicing a few years from now get in much less than me. I would like to remind you that the present assets of this Society, including this most valuable piece of property on the highway was purchased with dues from members most of whom are now dead.

This is a heritage which we now have to enjoy, to utilize in constructing a facility which we did not pay for. I certainly have no compunction against leaving a heritage to the future. I not only think it is a privilege but a duty that we take our patrimony and increase it, not decrease it.

To take any other stand would be to espouse a philosophy which medicine as a whole has been fighting for the past 20 years, the philosophy of using your patrimony and all of your heritage plus all that you can borrow against posterity so that we may have what we want now is anathema to most doctors' way of thinking.

I ask you to review these figures, to consider the savings to the membership of this Society over the next 20 years by short term financing, to consider that we can do this on less of a dues increase than we imagined we could in May and to take a course of action which will insure the continuity and the strengthening of this Society for the future so that our children and grandchildren may look back to this House and say it was not a selfish House, it was a House that had vision, it was a House that insured the continuity, the increased activity and influence of this great body. Thank you.

SPEAKER OF THE HOUSE: The floor is open for further discussion. Please come to the microphone, give your name and county. If anyone who wants to speak who is not a delegate, if you will call the attention of the Chair to it we will be glad to recognize.

DR. FRANCIS WHITLOCK: (Craven) This is a fine piece of financing here. The gentleman just presented a fine outline of it.

Now in coming up here this morning I couldn't see anything at all but clouds, but the question of financing is the problem at hand and it occurred to me that in this medical organization of North Carolina there are tremendous resources and if in just one way it would be simple to finance it over to the organization bonds, a thousand dollars a piece with possibly a six percent or five and a half percent in-

terest they would be subscribed for by tomorrow night. I thank you.

SPEAKER OF THE HOUSE: The floor is open for discussion. Those of us who have been to some medical societies and who have had correspondence over the past several days we are quite sure that several people including Dr. Shaffner will have something to say. Please don't be backward.

DR. LOUIS SHAFFNER: (Forsyth) I am sorry that all the membership cannot hear Dr. Lymberis and if the delegates are of the same ability as the present one before you he is not capable of presenting the situation to his membership as Dr. Lymberis presented to you and yet I as one delegate had to go back to my society, and the other delegates did too, and we did not meet with such enthusiastic reception. Dr. Lymberis' first speech, and I would like to give you the thanking of the Forsyth Medical Society, and its possible alternate method of financing.

You have already read the objections which were listed in the preamble to our resolution. After further discussion, reading of the information which came from the Headquarters Facility and considering all aspects of this, the society met again and passed a motion that our delegates should come to this meeting with an open mind but with the idea that the society as a whole, this was passed with only six dissenting votes out of approximately 80 members present, that this be financed in a long term basis.

The delegates from the society, we delegates, have considered it further and would like to bring this comparison to your attention.

If in Raleigh there were space available for a Headquarters Facility of 15,000 feet and if it could be obtained at four and a half dollars a square foot it would cost a total rent of approximately \$67,500 per year.

We are now paying, as I understand it, approximately \$92,000 a year rent on our present space. This leaves a difference of approximately \$58,000 a year that would have to be spent by the society to rent 15,000 square feet per year in Raleigh at four and a half dollars a square foot if it were available.

In order to get this \$58,000 per year additional the society would have to assess members, and working on 3000 as dues paying members, \$20 a year for 3000 members would give us \$60,000 a year, which would be a good cushion above the \$58,000 a year, increase in rent that we would have to pay if we could rent the space.

Now if we take Dr. Rose's figures as published in the material sent to you and if we could believe those and the recommendations of Mr. Worthy, we cannot only build a building but have some equity in it, build it in the condition that we like and have space for expansion for the same amount of money that we would spend if we could rent the space in Raleigh.

We have been renting now and we are getting no equity. If we pay the same amount in the future that we would have to pay for rent, if we could rent it, we could build a building, have place for expansion and

pay it off at the same price.

Therefore, our society would suggest that we do this on a long term basis in spite of paying interest, which we admit, but for the reasons which we have mentioned in our preamble we would suggest that this be financed by the increase in dues of not more than \$20 per year per member to be continued until any indebtedness incurred in providing the facility be paid off and at that time then the matter would come back for reconsideration to the House of Delegates, that these funds which are collected by this increase in dues be separately noted on each individual member's financial records in the Headquarters office and separately kept in a separate account on the Headquarters books in case any time in the future it seems that this building would not go through and that members had contributed to it and might have some say-so as to what was done with this money that had gone to that fund.

The point that we would make in just making this extra stipulation would be that we feel this should be a separate fund and separate money so that it can be treated as separate money and if it does fall through it may be refunded to the membership if we did not need it for that purpose.

Further details we might go into later and the complexities of whether we have a separate corporation to do this and then we pay rent to the corporation and the corporation builds the building, I hope will come out in the discussion. Thank you.

SPEAKER OF THE HOUSE: We already have three divergent ideas proposed. Please don't hesitate if there is anything about any of these proposals from these speakers to ask them questions. That is part of our discussion. You have a right to ask them questions as well as to have your own ideas considered. The name and the county from which you are a delegate.

DR. LAWRENCE ERDMAN: (Craven) I would like to just inject the feeling that goes along with that of Dr. Shaffner that in our part of the state generally we are in favor of long term financing. We are not completely familiar with all the figures involved, but from the standpoint of having new physicians come to the state, I think the possibility of their having to pay a tremendous amount during their first year of membership here in order to finance a new building is a great deterrent to getting new doctors.

In short, in our part of the state we feel that long term financing should be used.

DR. A. B. CROOM: (Guilford County) I would like to bring to you the feelings of the Guilford County Medical Society. The Guilford County Medical Society would like to bring to you not a specific plan but the general idea that we would recommend to this society a method of long term financing in that it more evenly distributes a load of a large number of physicians. Secondly, that it would not discourage the present members to leave the society nor be a hindrance to new members coming into the society. Thirdly, that the rental of space to specialties of the society and to other allied organizations would give us an opportunity for income which will not reflect itself in

increase in dues. Fourthly, that the long term financing plan will less likely be regarded as an assessment by the IRS and be denied as a deductible item. Fifth, we hope that this project as it does in many organizations will provide a long continued project to help hold the medical society together and give us something concrete to work for. And with these things in mind, we recommend to this society and intend to support a long term system of financing and we have come with open ears to hear the plans to be presented. I thank you.

DR. WILLIAM J. CROMARTIE: (Durham-Orange) Mr. Speaker, I think the sense of the membership of our society has been expressed by the last two speakers, that is we felt that there was urgent need for a new Headquarters Facility, but the financing of this should be on a long term basis primarily because of the discouragement that a sudden increase in dues would present to the new membership who would be coming into the society in the near future and we're not instructed as how to vote. We were permitted to come uninstructed, but I think the sense was that we should be able to take back to the society some new information that would clearly demonstrate the fact that long term financing was not feasible and I would feel that we would need more information and new information that hasn't been presented before we could really reverse the feeling of our membership. Thank you.

SPEAKER OF THE HOUSE: Thank you, sir. May I ask the privilege of the chair. I see in the back room the chairman of our Headquarters Facility, Dr. Hewitt Rose, and I would like to grant him the privilege of the floor. He is not a member of the House of Delegates but we would grant him the privilege of the floor. God knows he has done enough work to be entitled.

DR. A. HEWITT ROSE: (Raleigh) Gentlemen, I want to repeat to you that my principal interest in the method of financing is a method which is acceptable to the majority of the membership of this society and which will not alienate an estimated five percent of the society who perhaps would drop out of the society if the present method of financing were pursued. In my article there is one figure which I am rather embarrassed about. You will see on page 410 of the North Carolina Medical Journal, the current annual rent paid by the society is \$27,671. I can't explain how I lifted this figure from the multiple figures that Mr. Worthy and I were going over but it crept into it as the cost presently, as you will recognize by several other previous speakers the figure actually is about \$9200 which would make a difference of \$18,000 per year for the society or which would change by 7.70 per year per member to \$13 per year per member additional dues necessary to maintain our new facility.

I want to point out that this new facility will be more than three times the size of our present facility and we should certainly hope it would be infinitely more adequate for our needs.

Dr. Lymberis' presentation is very thorough on the subject. There is one aspect of it that I question

and that is on his long term, or even five year financing method, he has taken the figure of say \$650,000 and he has not left my part of that figure in my pocket for me to invest.

So rather than it costing us in interest over a 20 year period \$617,000 I don't think that that interest would cost me anything and I doubt if it would cost most of the members of the society anything I think I can get that much interest back on my own investing. That's all I have to say. I am not going to elaborate on the method I have advocated for financing. It is long term financing. Thank you.

SPEAKER OF THE HOUSE: Thank you, Dr. Rose. Any further discussion? Questions? Observations, plans?

DR. LYMBERIS: I would like to point out one thing though on this long term proposition, that it presupposes utilizing all of the reserves of this society and I think that's a very dangerous proposition. This outline shows a \$100,000 of reserves and while this sounds like a lot of money to an individual practitioner, it represents only three months operations of our society and, any business, large or small that utilizes all of its reserves and has no contingency fund for the emergencies which are necessarily and inevitably going to arise, is pretty dangerous financing.

SPEAKER OF THE HOUSE.

Any further discussion?

DR. JOHN L. BROCKMAN: (Guilford) If there is no further discussion, I would like to, if the chair will entertain a motion to rescind the action of the House of Delegates in May on the assessment to the membership.

SPEAKER OF THE HOUSE: Dr. Brockman, the specific one that you are talking about, I will read you the question that he is making the motion to rescind, that is, "Approved and adopted the recommendation of the Executive Council that the dues of the members of the society be increased by an additional amount of \$60" and so forth and so on. That is your motion?

DR. BROCKMAN: Yes, sir.

SPEAKER OF THE HOUSE: There is a motion before the floor. Is there a second?

(Seconded)

SPEAKER OF THE HOUSE: It has been moved and seconded. Now a motion to rescind, where there has been previous action not only takes a majority, a motion to rescind also opens the previous question for discussion, the main question, which is this question. I think it has been adequately discussed but I would not be fair if I didn't leave it again open for further discussion if anybody has some afterthoughts.

DR. FRANK W. JONES: (Catawba) A question as to procedure. After this motion to rescind is either passed or defeated, will it then require another motion to go back to the borrowing on a long term basis or is that the automatic result of an approval to rescind?

SPEAKER OF THE HOUSE: My interpretation of that, Dr. Jones, is that if this motion is passed, this action is rescinded and therefore you are open to

one of two things, either a new motion as to how to finance it or else reaffirmation of the original motion which states that the Executive Council be allowed to proceed with the borrowing of a certain amount of money.

DR. JONES: Then the third motion which was presented in Report N. C. which is the one about borrowing \$750,000?

SPEAKER OF THE HOUSE: That's correct.

DR. JONES: If this rescinds the motion brought at Tuesday afternoon in May, which is the one that the gentleman moved that it be rescinded, then that leave it back in the status of the \$750,000 long term financing.

SPEAKER OF THE HOUSE: That's correct.

DR. JONES: And someone could move an adjournment then and it would be over.

SPEAKER OF THE HOUSE: That's correct.

DR. JONES: Very good. I wish to speak to it.

SPEAKER OF THE HOUSE: Just a minute. A motion for adjournment is always in order. It doesn't have to be passed. Now, Dr. Jones, if I understand you correctly, the question you want to know is if this motion passes and this past action of the House made is rescinded, where do we stand?

Well, we stand as I stated, in one of two areas. We are open for now motions concerning raising dues and whatnot or it reverts to that motion (which also), number three, which also can be rescinded, if necessary. But I am asking that any motion to rescind specify one particular main motion which has been passed. Do you understand me or do I understand you?

DR. WYAN WASHBURN: (Cleveland) I would like for the people who have referred to long term financing to be a little more specific. I understand it can be five years, ten years or 20 years or of some figure between. I wonder just for clarification if the people from Forsyth and Guilford and the others who have proposed long term would say what they would like to have as long term. Would it be five or ten or twelve or fifteen. Let's have a specific figure that we can know where we are standing.

SPEAKER OF THE HOUSE: That's perfectly in order. Let me read this item three which was passed by the House of Delegates as a motion made by the Reference Committee, "Authorize the borrowing of a sum of money not to exceed \$750,000 for the purpose of constructing a Headquarters building upon such terms and conditions and amount as may be approved by the Executive Council and stipulated that the Finance Committee of the Society after consultation with the Headquarters Facility Committee be requested and authorized to investigate and recommend to the Executive Council methods or means of obtaining the funds necessary for the construction of the Headquarters building."

Now my feeling is that if this motion is rescinded and no further action is taken that action will be in force.

DR. PHILIP NAUMOFF: (Mecklenburg) I would like to speak on the motion. As you said it also per-

tains to the discussion that was held before. We have heard from various counties about a number of items and I would like to have some clarification. First of all the question was brought up that there might be some question as far as the Internal Revenue Service is concerned by assessment of dues over a short term of four or five years. I would like to know whether or not this is so or would an assessment of dues over a long period of 20 years be more acceptable to the Internal Revenue Service and perhaps our attorney can answer that.

Secondly, we have heard that new members coming into the society might find it difficult to pay this additional assessment of \$50 or \$60 per year over a period of five years. Is there some method that could be set up so that a moratorium for a period of four or five years, or less, on new members before they start paying this assessment of dues so that it would not be a financial hardship to them.

Thirdly, in the difference of figures here between long term financing and short term financing, we find that we are dealing with a figure of approximately \$30 to \$37 per year per member. This could be a financial burden to many people, I am sure. However, when I hear that a person can invest \$30 to \$37 a year and more than make up what he can get, or what he would have to pay rather, in interest over a period of 20 years, I find this very hard for me to believe. I would like to be able to invest \$30 per year and make up the amount of money it would cost me on long term financing as opposed to short term financing. Thank you.

SPEAKER OF THE HOUSE: Mr. Anderson, would you like to answer his question?

MR. ANDERSON: Any amounts contributed or paid to an organization such as the Medical Society is classified as, under the IRS regulations and code, as a business. Any contributions paid as a pre-requisite to membership in such an organization are held to be deductible. Therefore, any increase in the dues of this organization which are imposed as a pre-requisite for membership in my opinion would be deductible as a business expense.

SPEAKER OF THE HOUSE: Thank you. Does that answer your question?

DR. FRANCIS WHITLOCK: (Craven) The boys in our organization felt in terms of long term financing from 25 to 30 years. That is an answer to the gentleman's question a few minutes ago and while we are at lunch if there is no action taken on this long term financing, I should like the delegates to consider the bond issue to the members of the society at a five percent interest rate. You will be getting a return on your money. There may be some experts that can get more than five percent but I dare say there is not two out of ten in this room that can get five percent on his money tomorrow. And I should think it might be well if we think in terms of financing this thing within our organization at even five percent. Thank you.

SPEAKER OF THE HOUSE: Would anybody like to say anything to that? Anything else?

DR. HUBERT E. BATTEN: (Cumberland) I think there is an item of clarification needed here. I believe that Dr. Jones when he asked a question awhile ago that if this motion were rescinded that it immediately would revert back to long term financing. My impression is that is not true. Basically we will revert back to no terms of financing as yet. We would have to start all over again as to whether it would be long term, short term or what have you. Is this not correct?

DR. JONES: The Speaker clarified that. I believe you clarified the point that the term long term financing was not in motion three. It is my opinion that it is not in motion three and it refers as you said to no decision, except a decision may be made.

SPEAKER OF THE HOUSE: As approved by the Executive Council. As I stated, if this motion is rescinded the floor will be open for further motions just as though the motion had never been made. The motion to increase dues.

DR. MAITLIN: (Cumberland) Then we could proceed at that time motions for long term, short term financing or what have you.

SPEAKER OF THE HOUSE: Very definitely.

DR. PHILIP NAUMOFF: Again I would like to ask is there anybody in the audience who can answer my third question and that is if we do have an investment of dues of \$50 or \$60 a year for five years is there any method that can be set up so that new members can be given a moratorium for a few years before starting to pay that assessment of dues?

SPEAKER OF THE HOUSE: Dr. Lymberis, could you answer that question?

DR. LYMBERIS: In our deliberations, and I certainly should have added this, we considered as entirely plausible and feasible a three to five year moratorium. This would in no way jeopardize the financing. Again, we have this cushion of the proceeds from our inherited land that would make up this difference of carrying charges over this period. I would certainly envision a moratorium for new members.

SPEAKER OF THE HOUSE: I would like to say, Dr. Naumoff, when new motions are made to that effect, if Dr. Lymberis, and I am certainly not taking sides, but just for parliamentary explanation, if somebody made a motion to support Dr. Lymberis' plan, it would certainly be open. I mean if he made it just as he has expressed it here, the floor would be open for members to such effect.

DR. L. H. ROBERTSON, SR.: First, on the bond, I think if you buy municipal bonds now it will pay you five percent and you don't have to pay any tax on that. But speaking for myself, and I was voting on this down at Pinehurst, we figure it up and we borrow 25 years \$750,000 it would cost us \$912, \$900 interest on a 25 year loan. That much interest we are going to be paying at 25 years.

SPEAKER OF THE HOUSE: At what rate?

DR. BATTEN: Seven and a half percent. My bank says that's what you will get it for.

DR. ROBERTSON: Our group, speaking for the

group and in consideration of all of you is why not build what space we need and what it costs added to our dues and pay for it in five years and not build anything except what we are going to need over the next five years and build it so you can add to it if you need it?

SPEAKER OF THE HOUSE: We are still discussing the motion to rescind and the motion, the original main motion concerning the \$60 dues.

DR. T. E. ROSS: (Richmond County) I hope this is acceptable. You have asked for questions earlier. The question would be if there is expertise available that would give us some information that we may or may not have. For example, how would such an endeavor, the building of a building like this be handled by a concern in the commercial real estates business? If someone were building a building and this was their business. We are physicians, we are not in this business. If somebody was, would they pay it out of cash or would they finance it over the long term?

SPEAKER OF THE HOUSE: Can Mr. Worthy, who is our consultant, answer that question?

MR. FORD WORTHY: I don't want to go into economic theories but there is one economic theory that I think in adding up the total sum of interest paid over 20 years that has been overlooked and that is simply this: That interest is like buying time and you can mathematically in terms of the present worth of something, and you think in terms of the present worth of a building now paid for in cash and you can take mathematical tables and take the present worth of the money that you are going to pay over the 20 years which is going to include all this interest and cut it down to present worth and you come out with the same answer.

So in answer to your specific question I say this, that a professional real estate, say a corporate real estate company who was interested in obtaining a return on investment, would mortgage the property to its maximum so that they would have a greater leverage on the equity money that they would have invested. And in this particular situation this is a non profit organization and you are not trying to get a return on investment as I see it, so it seems to me that your real answer is that it's a question of buying time and if you buy time for 20 years you are going to pay for time for 20 years. If you buy it for cash, you are going to get it for cash. And it's about the same either way.

SPEAKER OF THE HOUSE: Thank you, sir.

DR. T. E. ROSS: My next question was is there any reason why the State Society should handle this in a different way than a commercial concern would? Would we have other interests as he has said if we were going in it on a profit making basis proposition we should handle it differently. And the third point is, he alluded to it, and the financing is very involved but I couldn't help but think of inflation. We are talking about a half a million to a million dollars and most of us our biggest financial dealings has been perhaps building a house and we are not anywhere near a half million or a million dollars. But

inflation is going to enter into any of these figures and all of the talk I have heard has been on fixed dollars. In your practice you can boost your fees a little bit if your overhead starts climbing but what can the State Society do? It will have to keep going back to the membership for increased dues if inflation keeps eating away at your money. So I would throw this back to somebody who knows more about it as to whether his first statement considered inflation.

SPEAKER OF THE HOUSE: Will you answer that please, Mr. Worthy?

MR. WORTHY: When I talk about a minimum investment to give you a maximum leverage on your money, the whole premise behind that in a sense is inflation, to borrow dollars that are worth say a hundred cents today and be paying back 19 or 20 years that might be worth 75 cents in today's market.

But another point mentioned here was that as costs go up, the long term financing is a 20 year or 22 years or 25 year contract and that does not change. The thing that will change during these years are the cost of operating the building, the taxes, insurance, repairs and maintenance and those costs we have discussed. The 15,000 feet that would be leased to tenants that are not medical society people but which would be in the expansion area, the second floor of the building. We are proposing that we would have an escalator clause in our lease there so that we would be able to take care of any inflationary costs and taxes, insurance, repairs and maintenance. And so far as the space of the society is going to use for its own purpose, it is going to pay for it. If it goes up, if the cost of labor for cleaning the building goes up or the cost of taxes goes up the society is going to have to pay that and I don't know that I have really answered your question here, Doctor. I think I have touched on the fringes of it. There might be a point that I have overlooked that you would like to touch on here.

SPEAKER OF THE HOUSE: Any other questions you would like to ask Mr. Worthy while he is here.

DR. STYRON: Yes, I would like to ask him a question. It seems to me that the matter at issue is whether the long term method of financing is going to cost the individual member any money. We know that the five year term of course will amount to an assessment for increasing dues from \$250 to \$300. The question I should like to ask if in the long term method of borrowing, we know in fact that it will cost the society some money but will in fact the individual members find an assessment necessary to support a long term loan, that is an increase in dues?

MR. WORTHY: I think the individual members are going to have to increase their dues perhaps \$13 to \$20 to bear the debt service and the present expenses, yes. I am talking now about a 20 to 22 year term. If you are going to cut the term, somebody mentioned the fact of a ten year term or a 15 year term, if you cut that term down, of course you are going to have ante up more in your individual dues increases. Does that answer your question?

DR. STYRON: Yes.

MR. WORTHY: Yes, you will have to increase it approximately \$15 to \$20, something like that.

DR. GLASSON: (Durham) I would like to ask Mr. Worthy or anyone else who has information, what has been the experience in other state societies who have built headquarters building. How have they financed their buildings?

MR. WORTHY: We have communicated with some other state societies and we have found that some of them have mortgaged them and some of them have gotten contributions to pay them off right at that time. Our correspondence with other state societies has not been primarily concerned with financing but it has been concerned with what type building they had, how their layout was arranged and things that we would need to pass on to our architect. We have not actually made a survey with other medical societies to find out specifically the method that each one has used to finance.

SPEAKER OF THE HOUSE: Any further questions of Mr. Worthy?

DR. ROBERT E. MILLER: (Mecklenburg) In your studies, how long would it take until the society could use the full building for its own purposes?

MR. WORTHY: I don't know that I can answer that. I think Mr. Barnes can give you a better answer to that than I. The question was how long would it take for the society to outgrow the first 15,000 feet. Is that right? And start into the second floor which is 15,000 feet? And my answer to that is I think Mr. Barnes is more qualified to answer that question than I but I will say this. The society currently has about 4100 square feet. It does not pay rent on corridors or rest rooms or what may be termed as non-exclusive space. It does not have an auditorium. It does not have a board room. There are a number of things that it does not have and also it is scattered over three floors so I think that the 15,000 square feet, first when you deduct the areas which you would call non-exclusive areas, like corridors, rest rooms and so forth, that nets out to about 12,000 square feet compared to the 41 or 4200 feet now and by the time you put your auditorium and your board room in there you are going to have, it would appear to me, at this stage it would appear to me that you are going to have enough room for your present operations for some time to come.

SPEAKER OF THE HOUSE: Would you like Mr. Barnes to answer that, Dr. Miller?

DR. MILLER: No, that's close enough.

SPEAKER OF THE HOUSE: Any further questions?

DR. LYMBERIS: I would like to elucidate that a little bit. I think we have forgotten in our deliberation the reason for this larger building. There was no one in the original deliberations who had any desire to go into the rental business. But it was determined that it was essential if this new building was going to serve its full purpose it should be near the legislature. In order to get land where we deemed it

would be most useful to us we had to buy a block of \$200,000 land.

Now it was utterly ridiculous and everyone who studied it and it was finally agreed with our expert who wrote out an opinion of both ways, how ridiculous can you be as to put 15,000 square feet of building on \$200,000 worth of land. This would be the most uneconomical use of this land.

If you have got this land which they are not making any more of, by the way, you can add your building and with the great demand for rental space you can then utilize this as income. Rather, this is not costing you anything. The building that you are building to rent out is not going to cost you anything. It was simply it is going to reduce your cost of the space you are occupying because you have enough tenants to help satisfy the large amount of money which was paid for this land.

Now you can get into all sorts of complexities about this. Basically it boils down to this. Are you going to pay \$200 or \$250 in five years or are you going to pay \$400 or \$450 over a period of some 20. Each has its advantages and disadvantages. But you can slice it any way you like and this is what it comes down to. \$200 on the barrel head, or \$400 to \$450 over a 20 year period with all of the encumbrances as that entails which we have pointed out.

I think there is another thing that Mr. Worthy has brought out that having paid so much interest I feel my own qualifications as an expert as having paid a lot of interest. Someone asked the difference between in this society as an investment thing and as a real estate company. There is a great deal. Any financial institution makes money by using money but individuals do not make money by using money nor do non-profit organizations. Certainly, if the XYZ corporation is in the rental business they are going to get as long term mortgage as they can so they may use their limited capital assets to build more buildings and thus use what is called leverage. But when an individual who is thinking about his home or his office or a non-profit organization is building he is not in the money business. He is not looking for leverage so that he may borrow at five and earn seven.

Now we have got to keep this simple because there is a big difference. The Medical Society of the State of North Carolina is not going to take the couple of hundred thousand dollars difference in any type of financing and go out and invest this at nine percent. If we are going to pay seven and a half and could reinvest what we are saving at nine, that's one thing. But this is not our business. So let's don't confuse this difference of the investment corporation and the individual non-profit corporation.

SPEAKER OF THE HOUSE: I hope you delegates fully realize that your Chair is aware of the fact that a lot of this discussion is not exactly pertinent to the reason why we are here. Now the question has been called for but the question doesn't necessarily have to be called for unless there is a two-thirds vote for it and the floor is still open to discussion.

DR. A. W. McMURRY: (Cleveland) Prior to calling

for the motion I feel obliged to say at this point the feeling of our society and that is the emphasis is then placed on having a building in this prime price area, two blocks from the legislature as that being the ultimate need of our society.

There is some serious doubt whether legislators are going to walk as much as two to three blocks over to our building when like in Washington the legislature recently said, well, doctor, I am glad you want to support my project or program but for God's sake don't let anybody know you are in favor of it.

I think that most effective lobbying in North Carolina is the trucking association and of course they operate right out of this hotel and they get a lot more for their money than we would by being this close to the legislature. So our society has serious doubts whether we ought to be building on this expensive property, rather sell the property, get some property a little further out, less expensive and build what we need.

SPEAKER OF THE HOUSE: This discussion can be continued ad infinitum or ad nauseum after this motion has been called for. I have heard several calls for the question. Now are you ready for the question? If there is no dissent for it I will call for the question. All those in favor of rescinding the action of the House of Delegates in May of approving and adopting the recommendation of the Executive Council that the dues for the members of the society be increased by an additional amount of \$60 and thereon make it known by saying "aye."

(Chorus of "ayes.")

SPEAKER OF THE HOUSE: Those opposed "no."

(Chorus of "no's.")

SPEAKER OF THE HOUSE: Those in favor please stand.

(Delegates in favor stood.)

SPEAKER OF THE HOUSE: Those opposed, please stand.

I think the Chair can declare that a majority has voted to rescind this action. Without a count. If there is any call for a division we will call for a count but I think it is pretty obvious it was passed.

The floor is now open for new motions to be made.

DR. JONES: Mr. Chairman, point of information. Does the maker of the motion have an opportunity to discuss his own motion?

SPEAKER OF THE HOUSE: After it has been seconded, yes, sir.

DR. JONES: Then, Mr. Chairman, I move you, sir, that this house suggest to the Council or endorse to the Council that a short term method of financing the Headquarters Facility be done as follows: \$250, period of five years with the privilege of curtailing that at one shot for \$200. I so move.

SPEAKER OF THE HOUSE: Is there a second? It has been moved and seconded. Now you have the floor to discuss it. Do you understand the motion? Repeat the motion, Dr. Jones. As I understand it, the motion is that this House go on record as recommending a short term financing of this building by

increasing the dues \$50 a year for five years, a total of \$250 or one payment of \$200. Is that your motion?

DR. JONES: That's the motion, sir, beginning Jan. 1, 1969.

SPEAKER OF THE HOUSE: The floor is open for discussion.

The maker of the motion, are you asking for a point of information?

DR. JONES: Thank you, Mr. Speaker. I might take a minute more than the allocated five minutes for a specific reason. I have been indeed pleased that this discussion came up. I was pleased to see the resolution come out because I think it has done something wonderfully good for the society. I think too long we have had too much discussion. We don't get a chance to participate. This is one time you have really had a chance to participate.

Our obligations have been spoken about. We have been told that we are putting, that we should not bear the burden of this. We have also been told of our heritage, what other people have left for us. We also should be reminded again that each generation should leave something further to the people that follow them.

Now very rapidly I am going through a few things. I am going to mention these. The Planning Council, which is your Blue No. 2 Committee, discussed the situation at the time of the committee conclave. Those members there unquestionably were in favor of the Headquarters Facility and there were many many reasons for it. The Planning Council as you know is the past presidents of your society extending back before the living ten that were nearest to the current president. Their consensus at that time was that if at all possible we should pay this off. Now I do not speak for the entire Planning Council because the entire Planning Council was not there but those that were there. Now, let's go just a moment—I, as an individual, did not necessarily favor this site on Heritage Square. This came up to purchase it during the term I was president of the society. I was convinced by the better weight of evidence, as my legal friend will say, that this was the smart place to put it. It was not my idea to have an immediate dues increase originally. When I heard it I latched on to it because I thought it was good. I had an experience of paying up in the American College of Surgeons. It has been the best investment that I ever made as a completed fellowship. I don't have any more. This was a smart deal even with inflation.

Now let's look at short term financing a minute. I too have had some advice. I too have gone to bankers and I am going to quote you what one banker said to me, immediately, when I came in with the proposal and asked him how he would do it if he had this situation in his own organization. And to paraphrase some of his remarks a little bit: He said, "Doc, you have a real peculiar and unusual situation here. If I were building a building to rent, there would be no question as to what I would do. I would borrow the money on it. But you have an opportunity

to get the funds from an increased dues and have it paid for."

This man was a managing executive vice president of one of our large chain banks and he said, "I hate to say this because it means that we won't stand to make and loan and make the profit."

Now times in the future are uncertain. We are not sure whether this is going to be a continued inflationary economy. It could be as some of you who are as old as I remember very well the depression economy when money was difficult to get. Certainly it isn't difficult to get today. If we believe these figures of the median income of the physician and add them up on your tax bracket you are only paying half of it to the government and getting a deduction for the remainder of it. And when you talk about \$30, \$40 a year, why goodness gracious those of you who went to a football game this weekend spent that without even knowing it. When I hear some of you affluent gentlemen talk about worrying about \$50 it just tickles me. You have two Cadillacs in the garage and everything else.

Then the other thing as I would like to point out is I believe that the legal profession have built a building for their headquarters facility and I would like at this moment to ask Mr. Anderson, if he is here, did they use long term financing, Mr. Anderson? Do I have the privilege of doing that?

MR. ANDERSON: No, sir. They used short term pressure and collection.

DR. JONES: Now these lawyers, you see they are astute people. They were smart enough to see that short term obligations was the best way to do it. Now speaking about the county societies, I spoke to a couple. I don't know how they are going to vote here but it is my understanding that there were some 180 members. It is my understanding they are probably going to favor short term financing.

Now another thing that I want you to definitely—at least this is my opinion, our operational dues are going to go up, period. We can't keep them at the current rate of \$95. That's an impossibility. We have already been told it is going to cost us from \$13 to \$20 by Mr. Worthy, who has done some very good studying on this thing, for each year and even if the operational matters are going to go up and if we could utilize the money which we might have from rentals to possibly keep these things from going up, so much the better.

Now the third thing that I would hope you would consider, and this is not really speaking to the motion originally but in essence a point and Dr. Lymberis mentioned it, and that is that we should not deplete our cushion of the money that we have in the bank because we definitely need approximately three to four months as a cushion, to have some money to operate on in case something happens that we have to pay something in a hurry.

I will certainly hope you people would consider that you are not broke, that you can afford \$50 a year, that you could afford \$200 and I believe it so much—I don't have too much longer in this thing—but I

believe it so much that right here is my check right now already made out for \$250. And I will leave it.

SPEAKER OF THE HOUSE: Before I open it up for further discussion, as a member of the House of Delegates, I would like to say that I am very flattered by my alleged affluence.

DR. WILLIAM McLENDON: (Guilford) The motion which we have just voted on to rescind the action in May of the House of Delegates is essentially the same motion that Dr. Jones has just made except for a ten dollar reduction. I cannot understand how the good doctor could bring this before the floor at this time when the motion has just been carried to rescind the previous action of the House of Delegates in May. And I wonder if he could explain this to me.

SPEAKER OF THE HOUSE: Dr. Jones, would you like to explain that?

DR. JONES: I actually voted for the motion to rescind to give everybody a chance to ventilate. To give them a chance to say what they had to. If they do not think this way and they have another plan, then this is their right and this is their opportunity. This is a motion to get action and not to sit around all the time.

DR. CROMARTIE: (Orange) As the previous speaker has expressed my views, I don't see how we could possibly go back to our society that really sent us up here unless there is new information to support the motion to finance this on a short term basis. We have not obtained anything new that we didn't have at the time so I think we are just voting on the same motion again. It seems to me.

SPEAKER OF THE HOUSE: I might say that this motion is entirely in order. You don't have to vote for it if you don't want to but it is in order.

DR. BRUCE B. BLACKMON: (Harnett) I would like to take a second to express my appreciation to Dr. Koonce for his presiding. We are working straight down the middle of the road and to our officials for having presented this thing in chronological order. I am concerned because I am caught on the horns of a dilemma personally. Whatever the dues are, I'd like to pay them off and have it out of the way. Dr. Paschal came with us to Harnett County awhile back and made an excellent presentation. At that time I was instructed to come and seek for a longer time than the five year period to pay off our building and it was not an effort to do away with the building it was just an effort on the part of the people there to ask for more time. I am not going to make a motion right now. I am going to throw an idea out.

SPEAKER OF THE HOUSE: Don't make one because there is already one.

DR. BLACKMON: I am going to throw an idea out for the group to play with for a minute. Why can't we split this thing in two ways. Let those that want to pay off their part in \$200 or \$250 pay it off and have it out of the way. And let that be done by a certain date, January the 1st, 1969, if you want. At the end of that time see how much we lack, having this \$600,000 that we need or the \$750,000 whatever that might be, divide that among the remainder of the

organization membership and let them pay for it on a 20 year basis. It will not be near the amount of the loan. It will amount to the same amount of interest per individual and they can take as long as they like to pay for it. Thank you.

SPEAKER OF THE HOUSE: Thank you, Dr. Blackmon.

DR. MELVIN W. WEBB: (Mitchell-Yancey) I think we have all overlooked one item. In 1956 our Headquarters Facility made an investment of \$26,104. Now that investment is worth \$150,000. These are figures that are pointed out in the Bulletin. That amounts to a 600 percent appreciation in a period of 12 years. That amounts to 50 percent appreciation per year. I don't believe we could beat that. I don't know if anybody can beat it. If our Headquarters Facility Committee had sense enough to make this investment in 1956 I believe we ought to go along with the people who are heading our organization now because I believe that our group now has as much sense as the group in 1956. If you can beat this appreciation now I would like to see the figures.

Now we have a group of experts who have outlined a program for us to follow and I for one am in favor of following the people we have elected.

SPEAKER OF THE HOUSE: I am getting more unintentional flattery than I have ever gotten before. I was in the group in 1956 too. Is there further discussion? I heard a call for the question, but the floor is open for discussion.

DR. WHITLOCK: There was a point brought up a while ago regarding the building of a building in another state. I happened to be in another state and we built a building. We built it four or five miles away from the capitol building. That was in Indianapolis, Indiana, on North Meridian Street, 3838, I believe it is, North Meridian. Now at that time the boys increased the dues \$20 a year and asked a \$50 donation from the membership. When they retired from medicine the \$50 would be paid back to them or if you left the state the \$50 would be returned to you. I left the state to get out of zero weather and snow drifts. They sent me my \$50 but they have a fine building up there. Thank you.

SPEAKER OF THE HOUSE: That is not particularly pertinent to the present question but we accept it.

DR. W. LESTER BROOKS: (Mecklenberg) I would like to make an amendment to Dr. Frank Jones' motion. I would like that amendment to include a moratorium for new members joining the North Carolina State Medical Society after January 1, 1968 for a period of three years before being asked to pay this additional assessment.

SPEAKER OF THE HOUSE: That amendment is entirely in order. Do I hear a second to the motion. Do you mean 1969?

DR. BROOKS: I intended 1968 so new members being called here being twelve months, won't have to pay immediately.

SPEAKER OF THE HOUSE: Is there discussion of the amendment?

Dr. Johnson, are you discussing the amendment

or the main motion?

DR. AMOS N. JOHNSON: Both.

SPEAKER OF THE HOUSE: Will you confine your remarks to the amendment at present. I will let you discuss the other thing.

DR. JOHNSON: Mr. Speaker, I will defer to anyone who wishes to discuss the amendment. It is my understanding that the original motion which was rescinded and for which motion I did vote, embodies a mechanism for a moratorium.

SPEAKER OF THE HOUSE: No, sir, it did not.

DR. JOHNSON: There was something passed by the House of Delegates in our last meeting in Pinehurst which did take into account a moratorium, was there not?

SPEAKER OF THE HOUSE: There was discussion of it but it was not within the motion that was passed.

DR. JOHNSON: I have been corrected. The Planning Council spoke to that. Then I would like to speak in favor of the amendment.

SPEAKER OF THE HOUSE: Now would you like to hear the amendment called for? All those in favor of the amendment let it be known by saying "aye."

(Chorus of "ayes.")

SPEAKER OF THE HOUSE: Opposed, no.

The ayes have it and now the main motion is open for discussion.

DR. JOHNSON: Mr. Speaker, I think maybe there are several factors involved in the fundamental thinking here as relates to whether we pay for our new facilities short range or whether we pay for it over a long period of time. I am afraid that maybe some of us may be giving consideration to the thought that it isn't our duty as the present membership to within a period of five years pay \$750,000 or a million or whatever it takes to provide a new facility for our society when there will be those who after five years will come in and will enjoy the fruits of what we have provided in our short range program.

I would hate to think that that might be a factor and I probably am wrong in thinking that that does influence the thinking of some people here. You know we years ago used to think of organized medicine as working hard to hand down to those who were going to come into medicine, hand down to them a house of medicine which was kept as a free enterprise, free for service, organization devoted to rendering services to the people of this country. I would remind you that in 35 years of my association with this state that we haven't done as well in handing down our heritage as those who have preceded me and maybe we owe it to the people following us in handing down a heritage to hand them a building. Maybe that's facetious, but gentlemen, we can borrow for short term purposes, the money that we need, that which isn't paid in at the \$250 one shot deal as Frank Jones did for five years interest. That can be gotten. I think we can borrow all the money that we will need for the next five years for five percent interest to be paid back within the five years. It will cost us seven and a half percent if we finance at six years or longer.

There isn't a person in this room if they had a

bank account sufficient to pay tomorrow for a new house which they might build for themselves or a new summer place which they might build for themselves who would not pay for that entirely out of the money which they had tomorrow. There would be no long term financing at all.

So why do we as a group, homogenous group of individuals who are actually basically financially no different from each of us as an individual, why do we choose to do something as a group which none of us would do as an individual? It really doesn't make a great amount of sense. I would urge you to consider the short term financing bit with the moratorium for the young men who are coming in and would remind you that under this circumstance that many of you would be paying less than 50 percent of the \$200 or \$250 which you might pay this year by virtue of your tax deductions.

Actually, the average person perhaps in this room if they gave a check today for \$250 would be paying less than \$150 for this building facility which we are putting up. And it really doesn't make a great deal of sense to string this out and give the lenders of money the benefit of reaping literally tens of thousands of dollars of benefit for their business when none of us as individuals would go along with this at all.

I would like very much to speak in favor of the short term financing for this building.

SPEAKER OF THE HOUSE: Thank you, Dr. Johnson. The Speaker doesn't have the prerogative of expressing opinions but with all this debate if you don't think my tongue is not bleeding, you are crazy.

DR. SHAFFNER: One comment to Dr. Johnson and one question to Mr. Anderson. Dr. Johnson, maybe some of us would have assets and we are also trying to build a building feel that the assets we have should not be liquidated because they would appreciate and we would do better by borrowing money at a fixed rate and hope that our assets would appreciate so I am not sure that those who would have the assets to build a building would still pay cash and liquidate what they have.

My question to Mr. Anderson is in reference to Dr. Blackmon's suggestion which is pertinent to the present motion. Would it be possible, Mr. Anderson, to have a dues plan set up so that some could pre-pay dues and others could pay over 20 years, which is what Dr. Blackmon has suggested. Would this still be—

SPEAKER OF THE HOUSE: Dr. Shaffner, I am going to ask you to hold that.

DR. SHAFFNER: I think it is pertinent because we have to vote on this motion.

SPEAKER OF THE HOUSE: You think it is pertinent to the present motion?

DR. SHAFFNER: I do. Because if his answer is yes, we can do it both ways, then we can amend the present motion. That's the reason I think it is pertinent.

SPEAKER OF THE HOUSE: All right. He has called for a question from Mr. Anderson. As soon as he answers it I will get to you.

MR. ANDERSON: I think it would be possible for a member to pre-pay his dues and to deduct it from his taxes. The question might arise which this I cannot give a definitive answer on as to whether some agent might question whether or not you could deduct it in the year in which you prepaid it. But I think that is a remote possibility. But the answer to that is, there are no decisions exactly on that point because the point involves such a little amount of money that I don't think any Internal Revenue agent would ever question it.

SPEAKER OF THE HOUSE: Delegate in the back who wanted the floor.

DR. BATTEN: (Cumberland) It would appear to me that the alternatives we are discussing at the moment for Dr. Jones' motion to return to the short term financing but in the discussion of it we have got to consider other alternatives so we will know whether to vote for or against. In terms of long term financing there seems to be a reasonable number here that would certainly desire long term. The show of hands and the support Dr. Jones got a moment ago would certainly imply that there is a reasonable number for short term. It would appear to me that the third alternative that the gentleman from New Bern brought up awhile ago would satisfy the individual to his preference. It would appear that if a bond issue, if we did float a bond issue selling bonds to ourselves, to the membership, such a bond issue on \$750,000, at six percent, would yield \$45,000 per year interest on those bonds. Divided among 3500 members, dues paying members, this would yield \$13 per member per year.

Under a long term plan we call for a ten dollar increase of dues per year. This means you have a net return of \$3.00 per year by financing it ourselves. Now if the tax man took 50 percent of our \$13 this is \$6.50. Therefore it has cost us only \$3.50 to finance long term under this arrangement. This tends to satisfy, I think the short term man can pay his short term off by participating in the bonds. The long term man if he wishes not to participate in the bonds can continue to pay his interest on the bonds to the short term man.

I think Dr. Blackmon's idea of prepayment of dues or he didn't state it that way, I think he was saying contribute and then the remainder would be in turn built in dues to the remaining membership that did not participate. I don't believe this is quite possible. I think it would have to be in terms of prepaid dues in order to accomplish this rather than their assessment.

I think the tax man would probably frown upon the assessment idea whereas prepayment of dues he would accept.

But it appears to me that the idea of the bond issue would leave it to the individual then to participate whether he desired as a long term or a short term vote in this financing project.

Once again, the figures are \$13 per member on the basis of 3500 members.

I think if one-third of the membership would par-

ticipate in the bond purchases, the entire thing could be paid for without any problem. The long term group then could continue on the basis of \$10 per year, the short term group would end up with about \$3.00 per year. Thank you.

SPEAKER OF THE HOUSE: Gentlemen, there is a point of procedure. We have exactly five minutes before luncheon recess. Now we have one or two choices to carry this discussion for the next three or four minutes and then recess and bring the motion back to the floor.

Dr. Jones, I will give you 60 seconds.

DR. JONES: 60 seconds you may have. It seems that I stumbled over a point here in the question of the original motion and I think it would be in the interest of this assembly to hear what I have to say. I don't recall that in the motion which I made and in the amended motion I didn't pick it up either, that in the beginning with the first year of admission of members admitted to membership during and after 1969. I fear that was omitted.

SPEAKER OF THE HOUSE: I have heard a call. Do you want any changes in that because of that?

DR. JONES: I move to amend, to include that statement.

SPEAKER OF THE HOUSE: Repeat it again.

DR. JONES: And beginning with the first year of admission of members admitted to membership during and after 1969.

SPEAKER OF THE HOUSE: But that is not superseding the amendment which has already been passed. That has nothing to do with the moratorium.

DR. JONES: It does not supersede the moratorium.

SPEAKER OF THE HOUSE: Do I hear a second to that amendment?

(Seconded)

SPEAKER OF THE HOUSE: Any discussion?

DR. TILGHMAN HERRING: (Wilson) I think that it's a bad amendment. I think it was a bad item in the previous motion because I think to tell every future doctor who comes to North Carolina that you have got to pay \$300 extra dues for coming to North Carolina is going to make it a little bit difficult to recruit physicians and recruiting physicians is a darn difficult proposition already.

SPEAKER OF THE HOUSE: Thank you, sir. The amendment has been made and seconded. Do you want the question on the amendment? All those in favor let it be known by saying "aye".

(Chorus of "ayes.")

SPEAKER OF THE HOUSE: The ayes have it. It is on those voting members. Not those who don't vote.

DR. THOMAS E. FITZ: (Catawba) We have been hearing talk of a quarter million dollars, half million dollars on up to a million dollars and actually it boils down to what comes out of the pocket. Present dues amount to \$7.90 a month and with the proposed increase of \$250 it would raise that approximately \$4.10 or to give you roughly \$12 a month out of your pocket. I belong to other societies. I have heard harangues going on for \$10 a month, \$10 a year

dues increase and I, frankly, with the risk of offending someone, call for the question to vote on this. And I speak in endorsement of the proposal.

SPEAKER OF THE HOUSE: The speaker has called for the question which he has a perfect right to do. And because there seems to be some disagreement I am going to call for a vote. It takes a two-thirds vote to close the debate or call for the question. Those in favor of calling for the question please raise their hands.

(Show of hands.)

SPEAKER OF THE HOUSE: Those opposed to call for the question.

The question is now called for. Those in favor of the main motion made by Dr. Jones, would you like for me to read it, or would you like for him to read it? All right. Dr. Jones, could you read it again.

DR. JONES: I don't have it written down, Mr. Speaker.

SPEAKER OF THE HOUSE: I think I can repeat it. The motion is that the dues be increased \$50 per year for five years or \$200 in a one shot deal. Is that right. The moratorium has already been passed. This is the main motion. The main motion as amended. Is that your motion? All those in favor let it be known by saying "aye".

(Chorus of "ayes.")

SPEAKER OF THE HOUSE: All those in favor of the motion let it be known by rising.

(Delegates stood.)

SPEAKER OF THE HOUSE: Those opposed, please rise.

(Delegates stood.)

SPEAKER OF THE HOUSE: The motion is carried by 78 to 60. A poll has been called for of the delegates. I might state that that is a majority of the voting delegates. It doesn't necessarily have to have everybody who is here. Somebody may not have voted. Now the gentleman has called for a polling of the delegates. Would you like to have it done now or after lunch. You want it done now. By polling the delegates we have to have their name and their vote and the only way that I know to do that would be to line up and go through the place back there and give your name and your county and how you vote.

DR. J. M. WARREN: I would prefer that the polling be done after lunch because there was a mixup in our delegation and two have not arrived because of the time.

SPEAKER OF THE HOUSE: He has requested that. Do you grant his request?

(Chorus of no's.)

SPEAKER OF THE HOUSE: I am going to ask for a vote on whether we accede to his request for recessing. Those in favor of recessing raise their hands.

Those opposed.

Those opposed obviously have it and we will not recess. We will now poll the vote and the only way is by roll call with a vote or else to line up and go through our committee back there.

DR. SHAFFNER: Would it not be in order for the

Credentials Committee to call out names from up there and let the vote be recorded so all can hear?

SPEAKER OF THE HOUSE: Perfectly all right. Either that or go by the Credentials Committee. Which would you prefer. All right.

(Dr. Wilkerson then called for a voice vote by the Registered Delegates only, during which the following occurred:)

DR. McMURRY: (Cleveland) I would like clarification on this matter for the new membership. In re-reading this thing I believe it says that the new members will have the assessment. We gave them a moratorium. We are giving them three years grace to start paying their \$50 but does this mean that they are obliged to pay \$50 for five years or at the end of the five years beginning in 1974 are you no longer assessing new members?

SPEAKER OF THE HOUSE: No, sir, my interpretation, and correct me if I am wrong, according to your amendment, sir, is that in '68, the moratorium would start for those members joining in 1968. Is that correct?

DR. LESTER BROOKS: The original amendment to Dr. Jones' motion that the moratorium would allow new members to be excluded from paying these dues for their first three years as members of the state medical society but after those three years they would pay yearly for five years as would the rest.

SPEAKER OF THE HOUSE: That's correct and what year does that start '68 or '69?

DR. BROOKS: For new members beginning after 1968.

SPEAKER OF THE HOUSE: Now this is not tantamount to a motion or anything. This is simply for understanding. Point of information.

DR. LENOX D. BAKER: I think he said starting, originally starting in January 1968 and your last statement you said after 1968. Do you mean starting '68.

SPEAKER OF THE HOUSE: You are absolutely correct. His motion was starting in '68.

DR. BROOKS: For members joining after January 1, 1968.

SPEAKER OF THE HOUSE: Well, you said starting in '68. That would mean members joining in '68.

DR. BROOKS: Yes.

SPEAKER OF THE HOUSE: That's the motion that has already been passed.

DR. McMURRY: If the motion is passed does that mean that during 1968 we pay the first \$50?

DR. BROOKS: This is starting January 1, 1969 that assessment be made. That motion is the members joining January 1, 1968.

DR. McMURRY: I think there should be a cutoff date.

SPEAKER OF THE HOUSE: You had an opportunity to make that amendment when it was on the floor. It has now been passed. The only way that could be done would be to reconsider. I don't think that those that I can see right now are very much in a humor to reconsider. Gentlemen, do you want to

recess for lunch and come back or do you want to finish it now?

DR. DENFIELD: (Delegate at large) I would like to clarify. All that is not part of the motion and has not been voted upon is the cutoff point. Certainly it would be in the province of this House of Delegates when the building is paid for at any year in the future to stop the assessment at that point. That is within our rights.

SPEAKER OF THE HOUSE: That was the assumption when the original motion of the \$60 was made last May. And the assumption, I took for granted was the same as this motion which somebody has remarked is essentially the same thing as the motion that was passed in May except for the change in the sum. There is a question that came up just a second ago. Did any of the Councilors vote twice as a Councilor and as a delegate? Or past presidents? I don't think the past presidents did. A Councilor may have.

DR. SHAFFNER: I did not vote twice. Do I have an opportunity to do so?

SPEAKER OF THE HOUSE: No, sir. I abstained from voting but I understand that the Credentials Committee put me down in the negative twice. So I have asked them to correct that. I am abstaining. Dr. Welton has some information that you might be interested in. There is no discussion on the floor but I am sure you all have not had enough information and will be glad to have some more.

PRESIDENT WELTON: Thank you, Mr. Speaker. There were two or three questions that came up during a discussion which did not pertain directly to the motion on the floor. One was why not build a size building for our needs right now. Why build a larger one? We have a very fine example of a reason why not to do that in our sister state of Georgia which put up a building some seven or eight years ago of 6000 square feet. The size of their society is roughly comparable to ours. They now need 16,000 square feet. They are putting an addition on, adding 10,000 square feet. They did not put the foundation on the original part sufficient to add on top of it so the addition has to be put on the rear. This will not give them as efficient a floor plan as if they had originally planned for a building larger than they needed right then. And it also took them some seven or eight months to arrange the financing that cost seven and a half percent.

The other point that I think is worthy of some comment is that why do we need to be near the legislative building. The legislature only meets every two years.

This is only part of the reason. It is actually less than half the reason. The location downtown as your chart shows near the legislative building is desirable for several other reasons. Namely that we are having to deal, your headquarters staff and your officers, more and more frequently with many many different state agencies and these operate every week around the calendar. Always the legislative research and study committees. Its vocational, welfare, the workmen's compensation agency. The several dozen state agencies that we have to have frequent contact

with and the amount of this contact and liaison work is increasing all the time. Thank you.

SPEAKER OF THE HOUSE: We will call for a report from the Credentials Committee.

DR. WILKERSON: Mr. Speaker, the official vote is 65 to 60 in favor of the motion.

SPEAKER OF THE HOUSE: 65 to 60. Is there any further discussion. A motion has been made to adjourn. It cannot be discussed. Any second to the motion?

(Seconded)

SPEAKER OF THE HOUSE: All those in favor let it be known by saying "aye."

(Chorus of "ayes.")

SPEAKER OF THE HOUSE: The motion is carried and the meeting is adjourned.

(Whereupon at 1:15 p.m. the meeting was adjourned.)

SUNDAY AFTERNOON SESSION

May 18, 1969

The First Session of the House of Delegates of the Medical Society of the State of North Carolina convened at two-fifteen o'clock in the Cardinal Ballroom of The Carolina Hotel, Pinehurst, North Carolina.

DR. DAVID G. WELTON: The 115th Annual Meeting of the House of Delegates of the Medical Society of the State of North Carolina is hereby called to order.

I'm going to ask the Reverend Edward Cronan, Chaplain, St. Joseph of the Pines Church, to give the invocation. (Rev. Cronan rendered the invocation.)

PRESIDENT WELTON: Secretary Styron, we may have some announcements now. (Secretary Charles W. Styron made announcements.)

It gives me great pleasure and privilege of presenting the Speaker of this House.

Dr. Donald B. Koonce has served this House with courage, distinction and integrity for nine years. It has been said that the measure of a man's success and ability can be pretty definitely gauged by the way he reacts to difficulty. They either spur him or check him, according to the quality of his metal.

Donald has many spur scars which he wears well.

It's my pleasure to present the Speaker, Dr. Donald B. Koonce of Wilmington!

[Whereupon the entire assemblage then accorded Dr. Koonce a standing ovation.]

DR. DONALD B. KOONCE [Speaker of the House of Delegates of the Society]: Thank you, Dave. Thank you, gentlemen.

I'm very much impressed, but I hope you're not misleading me! It kind of looks like a tough day! You may not act like that when I get through today!

You're going to be listening to me in a lot of remarks and different announcements that I have to make as we go along, so without further ado, we'll go along with the program.

And, it gives me a great deal of pleasure to introduce to you Dr. Otis Duck who is Chairman of Necrology.

These sessions that we have had in recent years as memorial to our departed friends during the past

year, have frankly meant a great deal to me and the older I get and the more vicissitudes I meet, the more important they come to me and they will to you.

Dr. Otis Duck!

DR. W. OTIS DUCK [Chairman, Committee on Necrology]:

Mr. Speaker, Mr. President, Members of the Families of those of our Colleagues Deceased, Members of the House of Delegates and Friends:

Out of respect for those of our associates who have completed their work on this earth, we thank you for the spirit of reverence which reigns here in this hall.

I'd like to recognize at this time one of our own members, Dr. Daniel S. Currie, who will deliver the invocation.

Dr. Currie!

DR. DANIEL S. CURRIE, JR.: Gentlemen, may we pray.

Almighty God, the giver of all gifts and talents, including knowledge, imagination and compassion that are necessary for Thy medical servants such as we, we thank you.

We do thank Thee for this day as we do for every day of life that Thou givest us.

We thank Thee for the occasion that brings these, our cohorts and colleagues together.

We thank Thee for this Medical Society, O God, for it as an organization and for its individual members; Those members who battle with bodily ills.

Bind strong this bond of brotherhood of those who fight with death.

Humbly, humbly, Our Father, do we invoke Thy blessing upon all projects of this Society and upon its officers and leaders. Cause us to think straight and to act properly in all of our corporate endeavors.

And, now, O God, do we thank Thee for these, for the lives and the memories that we have of those, Thy servants of mankind, who have preceded us in death.

We will remember their dedication to their work, the keenness of their thinking, the dexterity of their hands and the bigness of their hearts.

We ask Thy blessing upon their families and friends; comfort them by Thy spirit; cause them to think often and to think happily on the good that they did while here.

For us, we do ask Thy Holy Spirit to help us to live such lives of dedication and benefit to Thy children who are Thy creatures everywhere.

Bless us and help us and we pray this in Thy name, Amen.

CHAIRMAN DUCK: Ladies and Gentlemen: Even in the midst of our grief, I count it a privilege to introduce the speaker who will deliver our message of eulogy today.

Because of his deep, demonstrated compassion for his fellow men, I consider that he is eloquently qualified to render to us words of comfort at this time of bereavement.

Dr. Seymour is not only, in my opinion, an intellectual genius, but is indeed a spiritual giant. I think more of him than Robert Louis Stevenson obviously

thought of his pastor when he wrote what's on the front of the Memorial Service bulletin.

I take great pleasure in presenting to you a former pastor of mine at Mars Hill, who is now the Pastor of the Olin T. Binkley Baptist Church in Chapel Hill, Dr. Robert E. Seymour.

Dr. Seymour!

REVEREND ROBERT E. SEYMOUR [Olin T. Binkley Baptist Church, Chapel Hill]: I'm grateful for these gracious words and especially for the image of the faithful physician that I have seen personified in such a vivid way in the life of my friend, Dr. Otis Duck.

Whenever we come to a moment like this, we all experience mixed emotions for we may look about us and may realize that faces that were once familiar to us here are not with us this year and there is sadness and a sense of separation.

Yet, surely, the emotion that would offset this is the gratitude that is ours in the remembrance of lives generously given for the well-being of other people.

I could wish that I might have known personally all of the physicians whose names appear on the program of this service for I am sure these names personify the kind of self-giving life expressed in that statement of the teacher of Nazareth, who said to his disciples on one occasion, "I have given my life that you might have life!"

Surely, in a very literal sense, these physicians who have completed their work and who are no longer with us in the arena of this life, are persons who have given their lives that others might live.

I do not need to tell you that the life of a doctor is a demanding life, but I hope you will agree that for the doctor more than for most men there is an opportunity to experience life in its largest dimensions, for as physicians you are exposed to the heights and depths of life.

You meet life in its moments of joy and its moments of sorrow.

You stand with persons as they rejoice upon the arrival of a child and you stand with members of families as they stand by the bedsides of the dying.

You identify with people in their joy and in their sorrow.

The Apostle Paul commended to every man the ability to rejoice with those who rejoice and weep with those who weep, and it is my experience that physicians are among those who are most likely to practice this precept.

Your remembrance of these persons whom we honor in this way today, is a memory that is shared by countless other people.

It surely staggers our imagination to think of all of the lives that have been touched by these physicians listed here before us, today.

I'm sure that they are remembered for their professional skill, but I am also sure that they are remembered for their personal concern.

The role of the man in medicine, perhaps more than any other vocation with the exception perhaps of my

own, is one in which caring is a vital dimension of the vocation.

People, when they look to a physician, hope to find a person who is not only professionally skilled, but someone who cares and who communicates genuine concern for them as a person.

It is not an easy age to enter medicine, for, as you well know, medical practice is rapidly changing in this nation and many laymen are complaining that things are changing in such ways to make medicine more and more impersonal and that we're losing many of the values that were precious to us in the past.

This may be the case, but as I have listened to such criticisms, I have been interested to note that almost invariably, the person voicing this kind of concern would couple it by speaking in a very personal way of "My doctor!"

I am sure that these persons are persons who are remembered with gratitude, not only for their professional skill, but for their personal caring.

As a clergyman, I feel very close to the physician for I am very much aware of the fact that the New Testament tells us that Jesus of Nazareth came "preaching and healing." These phrases are linked together as if to indicate a common shared ministry for persons.

It is no accident that modern medicine, as we know it in our western world, has blossomed in western culture and surely, this suggests an intimate relationship to the ideas that we associate with a christian world view, or Judea-Christian world view, for in our western world, you have been taught to respect people and to recognize that man is a whole being.

We made a serious mistake in ever dividing man up into soul and body; speaking of man's soul and body as if they were separate entities.

Man must be met in his wholeness.

The theological word, "salvation," is a word that might appropriately be translated, "health," "wholeness;" expression of concern for the whole man.

I say this to suggest that these physicians whom we remember today were persons surely who ministered to their patients, not simply as bodies, but as patients whose physical well-being was also intimate patients whose physical well-being was also intimately bound up in their spiritual and emotional well-being.

I'm impressed by how many doctors say to me that many of the people who come to them ostensibly for some physical ill come because they need somebody to talk to, or come to express some anxiety, come in need of some reassurance and look to the physician for guidance.

I believe physicians also recognize that the spiritual and physical are intimately linked together.

I would share with you a story which I think is appropriate to this occasion, a situation in which a physician standing at the bedside of a dying friend, found himself called upon to offer spiritual counsel.

The patient knew that he was dying and he looked to his doctor and said, "Doctor, what does it mean to die?"

And, the doctor somewhat caught off base by this unexpected question was fumbling for the appropriate word and as he reached for the right word, he heard a scratching at the door from the hall and then he knew that the right word had been given.

He said, "You hear the noise at the door? That scratching is my dog that I left in the hall. My dog has never been in this room. He doesn't know anything about the furniture of this room but he knows that I'm here and wherever I am, he wants to be and he knows that in my presence, he is secure, so death is like that!"

We move from this life into a new and different dimension of life, the nature of which we cannot fully describe.

I cannot define for you or draw for you the picture of heaven, but I can say to you that the God who has met us in this life and sustained us in these years, is the one who also anticipates our needs at this time of transition and in His presence, you will be secure.

So, in remembrance of this word of spiritual counsel from a physician, I would like to commend these friends of yours to our continuing remembrance and to the care and mercy of our everlasting Father, God. Let us give thanks for this.

O Thou, who art the author of life, we praise Thee for these persons who have worked in our midst. We thank Thee for every evidence of Thy spirit that we have seen at work in their lives.

We thank Thee for their compassion, for their diligence in duty, for their attentiveness to the needs of Thy children.

We praise Thee for the unselfishness of their service, for their willingness to go far beyond the second mile, for all of the patience and understanding expressed to those around them.

We also commend to Thy care this day the members of the families of these persons. We pray Thee that they may be comforted. We pray Thee that the remembrance of all the lives who have been blessed through their loved ones will be unto them a source of continuing joy and thanksgiving.

And, now, O Lord, we pray that in the presence of death we may perceive more clearly the meaning of life and may from hence forth give ourselves more fully to a calling that is ours, that we may bless those who are entrusted to our care.

For all of this, we ask in Thy Holy Name,
Amen.

CHAIRMAN DUCK: It has been brought to my attention that inadvertently a name was left off the list, as published in your hands.

That name is Dr. Charles Nance of Charlotte.

Let us pray together.

[Whereupon the entire assemblage recited with Dr. Duck, "The Lord's Prayer."]

SPEAKER OF THE HOUSE: That's a very impressive, very fitting ceremony, which I'm sure we're all appreciative of.

Of course, we realize that those who have gone before us are men who have contributed a great deal

to this great and wonderful Society and the profession, as a whole.

I wonder if I could call on the Credentials Committee, Dr. Wilkerson, for a report as you stand now.

Dr. Wilkerson!

DR. CHARLES B. WILKERSON [Chairman, Committee on Credentials]: Mr. Speaker, we have 106 members that are duly certified. I believe that represents a quorum.

SPEAKER OF THE HOUSE: There are 208 delegates so it is a quorum.

The next thing on our program is recognition of guests.

I don't know of any particular distinguished guests that we have at the present time. There are two introductions which gives me a good deal of pleasure.

First of all, your Vice Speaker, Dr. Jim Davis, if he will stand.

Dr. Jim Davis, at the back of the room! Come on down.

Next is my Parliamentarian—Dr. Hubert Poteat. Dr. Poteat, please stand and be recognized!

[Whereupon Dr. Hubert Poteat stood up to be recognized.] [Applause]

I have a public apology to make to Dr. Poteat.

Last year, he made a motion to table. I called him out of order and he said he was the Parliamentarian and he had a right to make a ruling, but I overruled him, being absolutely positive that I was right.

Well, unconsciously, he was right! [Laughter]

I had read part of the parliamentary rules the night before that had something to do with objections to considerations and I got it mixed up. He was right and I was wrong, but I was so positive that I was right.

It reminded me of the story of two men who were talking and the first one said, "Anybody that's positive is an idiot!"

The second one said, "Are you sure?"

The first one said, "Absolutely!" [Laughter]

So that was more or less the position I was put in at that time.

My apologies to our brilliant Parliamentarian, who lets me get in trouble and lets me get out the best way I can.

Now, we have representatives here from Students American Medical Association. If they will come to the microphone and give their name and be recognized, we will call on them later for a brief message from one of their representatives.

Are there representatives from SAMA here?

Will you go to microphone number one please, sir and identify yourself?

MR. ELLIS FISHER [University of North Carolina Medical School, Chapel Hill]: Ellis Fisher from University of North Carolina!

SPEAKER OF THE HOUSE: Glad to have you, sir.

MR. EDDIE L. HOOVER [Duke University Medical School, Durham]: Eddie Hoover, Duke University!

SPEAKER OF THE HOUSE: Glad to have you, sir.

Any other representatives of SAMA? [No response]

We will call on a representative of them in a few minutes.

Now, it gives me a great deal of pleasure to introduce our President. Many of us have been through the turmoil of the presidency. We know what it is. It takes a great deal of aplomb and knowledge to handle it properly and I don't know of anyone who has handled it more properly and with more aplomb than my very good friend, Dave Welton.

[Applause]

PRESIDENT WELTON: Thank you, sir.

Mr. Speaker, Past Presidents, Fellow Officers, Distinguished Guests and Members of this House:

The purpose of this report is to summarize for you the activities of our Society during the past twelve months.

With sixty committees engaged in a high degree of productive activity; with staff and officers "on the road" almost constantly, attending meetings, participating in conferences and hearings and fulfilling speaking engagements; with three extra meetings of the Executive Council (a record, I'm informed) and one called meeting of this House, it is manifestly impossible to give you a complete accounting in a reasonable length of time.

From the time I received the petition from Forsyth County in June, 1968, right up to today, it would be an understatement to say this has been an unusually active year.

Rather, it has been intense, demanding, hyperkinetic, at times hectic and tumultuous, occasionally frustrating but over all, satisfying; in short, "It has been a ball!"

My own duties have taken me from Culloweehee to Goldsboro and from coast to coast. In this Jet Age, you know, you can have breakfast in London, lunch in New York, dinner in San Francisco and your baggage may be in Australia! [Laughter] Mine got lost a few times but it never got that far away!

So, in the interest of time, let me attempt to give you an admittedly incomplete survey in summary form.

1. Organization Meetings:

First, the Executive Council had meetings on August 11, September 29, 1968, January 27, March 23 and April 10, of this year as well as yesterday, May 17, a day I shall well remember.

Because business of the Society is increasing so rapidly it has become evident that three meetings a year are inadequate.

Second, the meeting of the called meeting of the House of Delegates on November 10, 1968. There had been consultations, deputations and discussions at the county levels and so on and it was a very impressive demonstration of democracy at work. You came prepared to make a decision and you made it in a gentlemanly and businesslike way.

Last September's Committee Conclave was the most productive in my memory. The reports of these committee activities really deserve a full day's review by the Council, and that has been one of my recommendations for the coming year.

The January Officers Conference was up to its usual high quality. One of the star speakers was Philip

Lesley who's nationally recognized as a public relations consultant as well as a noted scholar.

In addition, we had numerous committee meetings which are documented in the Compilation in your packets.

Now, I'll give you an incomplete run-down on some national and regional meetings in which we participated.

First of all, of course, the annual AMA sessions in June and the mid-year session in December. We take a total of approximately twelve persons to these meetings; four delegates, four alternate delegates, four officers plus two staff members. It takes that many people to monitor all of the Reference Committees of the House of Delegates of the AMA and that is where most of the action is.

The AMA Communications Institute, which was held in August in Chicago, at about the same time a meeting of ours met, which is an association of state medical association presidents, presidents-elect and past presidents and was founded largely through the efforts of our late President, Ted Raiford.

The Congress on Continuing Medical Education in November was a first; the first one put on primarily for representatives of state medical societies and you will hear more about this later.

Another Congress on the Socio-Economics of Health Care was attended by a number of us in March.

A Medico-Legal Congress in March.

A Conference on Health Care Costs in Atlanta.

A Conference on Nursing in Chicago in April.

This gives you some idea of the scope, the geography and so on, which are involved in keeping up on a national scale with all the problems that face us these days.

We had, in addition to these, some meetings with interrelated groups, such as Law and Medicine in Raleigh, last June; a series of Utilization Workshops all over the state; a rural health conference; a mental health conference; a highway safety conference, involving representatives of the State Highway Patrol, Department of Motor Vehicles and the State Medical Society and the State Board of Health; a Medicine and Religion Workshop in January; a meeting of the North Carolina Association of Medical Assistants, annual convention in Salisbury in April.

In addition, many governmental commissions, committee hearings, meetings with Council on Comprehensive Health Planning, Regional Medical Program, Committee on Patient Care and so on.

Then there was developed, spontaneously, a non-official, non-profit group called the Joint Conference Committee on Medical Care, made up of the key people representing all sectors of medical education and the delivery of medical services. This group meets about once a month and tries to tie together some of the loose ends which exist today in these wide fields.

This is, of course, an incomplete list and I don't want anybody to feel left out and, certainly, everyone who has participated in these activities deserves credit.

Of particular import, there are a few I will mention now.

First of all, those internally with relation to our organization. The Headquarters Facility Committee has been active since your decision of last November 10th.

The contract with the architect was signed December 6th. The building plans, preliminary plans, floor layouts and so on were studied by the Executive Council yesterday.

The model which has been prepared by the architect is on display in the front lobby and the next step will be to get detailed drawings, specifications and bids. The details of this will come to you under that committee's report.

Now, one of the principal objectives of this year was to improve our communications.

First of all, we employed, for the first time, a field representative, Dan Mainer, who started work with us June 15th and has been making the rounds of the county medical societies ever since and I would encourage more of the societies to avail themselves of his help in projects they are considering at the local level, as well as getting information. We consider him to be a vital chain in our two-way communication between the State Society headquarters and the county societies.

Then, we put on what you might call a "Ninety day Road Show" concerning the headquarters facility. This began August 11th and lasted until November 10th. It involved all the officers, the Councilors, the Commissioners and the staff.

During that period of ninety days, forty-two county medical societies were visited. This was more person-to-person communication in ninety days than the Society had experienced in a long time and it was, in my opinion, a very healthy experience for all of us.

It illustrated today's lesson in communication.

We're all swamped with mail. I'm tempted at times to speak to physicians as fellow victims of the daily mail flood. We get so much printed material, we haven't time to read it. We scan some things on radio and TV, but the lesson, I believe, is to take the "show on the road" and give it person-to-person.

When you get a group of people together whether they're physicians or lay people, whether it's ten minutes, fifteen or twenty, this is the golden opportunity and I would encourage more of you to do this more often.

We arranged for a number of articles in the Journal. We had reprints of those mailed to you. We made every effort to get all the facts to you.

Reports of the Council have been published in the Journal.

We have sent you mailings and telephone calls at an increasing tempo during the past few weeks concerning legislative matters and, at times, we are in need of more feedback information from these requests.

Another project which you might not have heard much about is the thirty minute television program to encourage high school students to consider seriously

going into the medical careers, not just physicians but other paramedical fields in addition to physicians and nurses, technicians, medical assistants.

There are whole new families of technicians and assistants which are being developed. This has now been revamped. A new edition is available on educational networks and will soon be available for commercial stations.

Following that, we intend to have film copies made which will be circulated among our high schools.

This is part of the effort of persistent recruitment.

Blue Ribbon Committee No. 1 has previously reported on suggested changes on annual session. One of them is in effect this year—having section meetings Monday and Tuesday morning; publications and currently, are working on committee structure.

Meanwhile, an evaluation of the operation of the headquarters office, not the building but our present operation was authorized and has been in the process of being done by a management firm from New York and Miami, Rothrock, Reynolds and Reynolds. Their work is almost completed. A report will be ready for us June 6th. It will be considered by that committee and then considered by the Council.

The Planning Council has been active. They are developing long-range objectives and recommendations, which will come to you later. There is a copy of those in your packets.

You will recall that last year, one of your actions was to authorize the President to appoint a permanent Committee on Medical Education and certain stipulations were included in that resolution.

It was, of course, impossible for me to appoint a permanent committee; such committee has to be provided by the by-laws and the mechanics of this will be presented to you later.

This is a very important subject and a very important responsibility of this Society. For that reason, considerable time and study were given to it before the committee was appointed. We waited until a large group of us had attended the meeting in Chicago on Continuing Medical Education. We consulted with AMA officials. We consulted with many other state medical societies who are ahead of us in this development.

The committee was appointed with Dr. Mark Lindsey, our Second Vice President, as Chairman. They have met and they have prepared a very extensive report, a copy of which you have.

I believe that this may well become the most important function of this Society and I commend to you their report. Please study it in detail.

Ultimately, these recommendations will require full staff and appropriate funding, but at the start the functions we consider most important include corollation, coordination and more participation in continuing education, plus the recruitment and training of allied personnel.

Another very important ad hoc committee was Relationship with North Carolina Blue Cross-Blue Shield. Among their recommendations is one to have a new 27-member committee representing thirteen special-

ties and our ten districts with the Chairman becoming an ex-officio member of the Board of Trustees.

This will be presented in more detail to you later.

Now let's look at some of the external functions of our program of special import.

First of all, I'll mention the Regional Medical Program.

You are familiar with the fact they have between fifteen and twenty operational grants. We now have the results of what was truly a monumental survey conducted by Professor Harvey Smith and his associates. This survey now makes it possible for physicians in any and every community in our State to pinpoint their own needs in that community and then through the RMP, seek the needed help and assistance and equipment, additional training of personnel and so on, which are needed for them.

I believe that we are on the threshold of a tremendous expansion of this program, and this after all, was the original objective of the legislation—to provide the extra information, latest research, therapy, diagnoses and so on, to the physician in his own community.

This is now where we need more action—on the home front!

About three weeks ago, it was my pleasure to participate in the dedication of an unusual installation which was funded through RMP and I'm referring to the Coronary Care Unit Equipment which is now installed in eight small hospitals in the Southwestern corner of our State, known as the State of Franklin Health Council. The hospitals there have formed a health council. The physicians have formed an academy and each of these hospitals—and they're all small, fifty beds or so—now has the most up-to-date coronary care monitoring equipment that's available.

They don't all have the separate physical unit. This is being planned, but they do have the equipment and the nurses and so on have been trained.

At the time of this dedication, so far as we could tell, this was the only project of its kind in the United States.

There is an account about it in the magazine called, "IMAGE", which is put out by the Roche Pharmaceutical Company. If you have access to that, you'll be interested in looking through that.

The next subject I want to touch on briefly is aid to our three medical schools.

We have gone along with the three deans and the administrative associates of the teaching hospitals on numerous hearings to members of the State Legislature and also to Washington to our delegation in Congress, in order to bring the facts to them about the real financial plight of our medical schools.

I described this in one of the President's Messages in the Journal.

There is some very important legislation pending pertinent to this in our General Assembly at the present time. Dr. Hubert Poteat is going to give us a full legislative report. I presume he's going to include this. He learned just yesterday that the House Com-

mittee on Higher Education gave a unanimous favorable report to House Bill 653 which provided a mechanism of aid to private medical schools. In addition, there were three bills put in which are still in and still pending to make additional appropriations to the medical school at Chapel Hill.

Something like 1,694 bills have gone into our General Assembly; 240 relate to health care and they have been studied in detail. Of these, 42 supported; 3 opposed and 3 sponsored.

We have a Task Force on Title XIX. This has been a very busy group the last three years. They have had multiple meetings with various state agencies, including the administrative department, advisory budget commission and so on.

I believe this is still pending.

Our Auxiliary put on a very good day at the Legislature in March.

Our staff members, our President-elect, and a good many others have devoted countless hours to formal and informal conferences with members of our General Assembly.

Now, I want to tell you a little bit about Medicare, Part "B".

North Carolina's operation of Part "B" Medicare has received national acclaim and has been cited by the Social Security Administration as a model operation.

In 1968, approximately 375,000 persons in our State were eligible. Combining the premiums paid by the patients, the people eligible, and the matching portions from the government, the total of \$34 million was in premiums.

The amount of claims paid out for physicians' services was \$18.9 million.

The administrative cost was approximately \$2 million.

So there is some excess here which is probably used in other states, but the real point of giving you these figures is to show that fee escalation is not a problem in North Carolina. A profile "cut-off" at a prevailing level has not been necessary. I think there is great credit due to the physicians of this State, to the Pilot Life Insurance Company, administrators, and to our own Insurance Industry Committee which provides a built-in control mechanism—the claims review function which evaluates, questions fees or utilization.

We have a companion committee, Blue Shield Committee, which has a similar claims review function: both of these committees have worked continuously and diligently and are due great credit.

We are assured of a smooth transition to the new carrier, The Prudential Insurance Company of America, on July 1st. Their officials have been at work now for several weeks with the Pilot people and you will have the pleasure of meeting them in a few minutes.

There was an exchange of telegrams and correspondence with the former Secretary of HEW, Wilbur Cohen. Copies were sent to each member of this Society.

So far, nobody has criticized that and I would like

to submit this to the recorder for its inclusion in the record, please.

[Following are the telegrams exchanged:

January 1, 1969

Dr. D. G. Welton, President, Medical Society of
State of North Carolina
203 Capital Club Bldg.
Raleigh, North Carolina

I have today promulgated the existing rate of \$8.00 a month for the supplementary medical insurance program of medicare—\$4.00 for the insured persons and \$4.00 for the federal government for the period July 1, 1969 to June 30, 1970. I took this step in the face of actuarial advice that physicians' fees are likely to increase substantially next year and in 1970 over current levels. I conclude, however, that it is both feasible and desirable to limit the liability of the medicare program.

To stay within the new rate will require restraint on both fees and utilization by all parties concerned. I urge your wholehearted cooperation on this important matter.

Wilbur Cohen, Secretary, Health Education & Welfare.

WESTERN UNION TELEGRAM

January 9, 1969

Secretary Wilbur J. Cohen
Department of Health Education & Welfare
Washington, D. C.

Considering the HEW record of administratively under-estimating costs when planning and legislatively estimating medicare to the congress, there was little surprise at your year-end public enunciations of the participant and government rate of insurance premium imposed for the fiscal period of 1969-1970. To impose such continued rate despite contrary intradepartmental estimates and advice is consistent with the secretary's and HEW manifest position through decades of planning and expressed philosophy, which can only lead to interference and control of the private aspects of the health care enterprises of this nation, which neither the law or quality of prevailing care justifies. Therefore, speaking for the state's medical profession in general, we do reject the philosophy and the administrative rightfulness of your telegraphic proposal of January 1, 1969; nor can we postulate the feasibility or desirability of your expressed fiscal proposals or goals as expressed therein.

This state medical professional group, never in absolute consonance, has broadly endeavored to relate service charges to inherent costs and liabilities consonant with quality delivery and has made much and consistent effort to control utilization to quantum-quality needs: Therefore, we reject your theorem of imposed restraint and regulation directed to, and over, this segment of professional health care in our nation's system while at the same time we are continuing our concept of usual, customary and reasonable charges for medical services to all segments of North Carolina

population in medical need and with the avowal of consistency and conformance as we understand the law. At the same time we cite inflationary trends affecting physicians and their enterprises no less than all factors of our productive economy and we can well fault an administration fraught with inefficiency and waste as accountable for much of your administrative dilemma in HEW and other branches of government.

Respectfully, David G. Welton, M.D., President
Medical Society of State of North Carolina.

END

Following is a news release of the Medical Society of the State of North Carolina:

CHARLOTTE, January 11—The physicians of the United States did not create the inflation which is eroding the purchasing power of the U. S. dollar and it is a gross injustice for certain government officials and numerous columnists to insinuate that physicians are responsible for this situation, State Medical Society officials declare. In a statement for the State Medical Society, President David Welton, M.D. of Charlotte, said, "Like all other citizens, physicians are victims of the current inflation."

Newspapers have carried several stories recently in which Secretary of Health Education and Welfare, Wilbur J. Cohen, has accused physicians generally of over-charging Medicare and Medicaid patients and of being responsible for causing financial difficulties in these programs.

Certain columnists, in discussing the steady rise of the Consumer Price Index, said Dr. Welton, have stated that the greatest factor in this rise is the increase in health care costs.

The Medical Society statement came in rebuttal to these stories and a warning by Secretary Cohen, at a recent news conference, that if the nation's doctors don't hold their fees to present levels then limitations on fees for which doctors could be reimbursed would undoubtedly be imposed.

Before he may begin the practice of medicine, says, Dr. Welton, the physician must make a very sizeable investment in his professional education and training. He is often 30 years old before he can BEGIN to support a family. His years of good earnings are comparatively limited; he is increasingly subject to breakdown of his own health brought on by overwork in attempting to provide more medical service to more people. None of these hard facts of life have been altered favorably by inflation.

What has happened, according to Publisher John S. Knight, of the Knight newspapers, is a failure of the Johnson Administration some 29 months ago, in 1966 to "take the people into its confidence and raise taxes enough to pay for the Vietnam war as well as the New Society programs." Edwin L. Dale of the New York Times writing in The New Republic, said had it not been for a "colossal goof" by the President and his advisers in 1966, "we would today have a rate of inflation of close to

two per cent instead of the far more dangerous 4.5 per cent to 1968."

In a similar fashion, the government officials who promoted the passage of Medicare and Medicaid failed, by their own later admission, to project accurately the costs of these programs. Congress shared in this failure because it was given the benefit of expert actuarial testimony from the non-governmental economics field that these programs would in fact cost several times the government's projected amounts.

Now, during the last days of his tenure as Secretary of Health, Education and Welfare, Cohen is again blasting the physicians of this country for making modest increases in their charges. It is patently unfair and unworthy for Mr. Cohen to make such accusations. He knows that 70 per cent of the costs in our hospitals go for wages to hospital personnel. As those wages have increased, corresponding raises have had to be granted to similar personnel employed in physicians' offices. Last year, the Department of Health Education and Welfare itself publicly admitted that Medicare costs would have been much higher had it not been for the increased productivity of the physicians.

It is timely to realize that neither Medicare nor Medicaid can work successfully without the cooperation of the medical profession. This cooperation has been extended in a multitude of ways in addition to the care of the patients themselves. Physicians and medical society staff people have spent countless hours and travelled countless miles to attend coordinating conferences and workshops with health, education and welfare and other government officials during the past three years in sincere efforts to make these programs work, through peer regulation of utilization.

Mr. Cohen's attitude and accusations are most unbecoming to a high government official who, in the past, has asked for the assistance of the medical profession and has received it, says Dr. Welton. He might just as logically blast our combat men in Vietnam for the high cost of the war.

PRESIDENT WELTON: As your President, I want to thank you for the response, not only to this, but to many other events and problems during the year. Your comments and criticisms are always welcome. We want to do everything we can to improve a two-way exchange of communication.

Now, I mentioned the Conference on Highway Safety. I don't think it's possible to over-emphasize this.

The fatality rate in the United States is running something over 60,000 per year. If the present rate continues—it's about a 45-degree angle on a curve—in 1975, the fatalities will be in excess of 100,000 a year. Our State Highway Patrol has pushed their enforcement to a point where they are encountering great public resistance. They don't think they can enforce it any higher and what they call their Enforcement Index is about the highest in the country.

So, additional steps are going to be necessary because approximately twelve to fifteen per cent of drivers account for more than fifty per cent of accidents.

There is research going on now. There is planning to develop driver evaluation clinics where a person who has got a number of violations and is quite a problem, can be thoroughly examined and a decision made as to whether he should be continued to be allowed to drive.

You are aware, of course, that the state highway patrolmen can give a citation to anyone now whom he suspects as driving hazardly and possibly due to a medical condition. This person then is examined by one of the thirty volunteers, physicians, who work on this committee advisory to the Department of Motor Vehicles.

A very thorough examination is rendered, sent into Raleigh, a decision is made. If the patient's license is revoked, there is a process for him to appeal to the appeals board, a very democratic process, and this is working very nicely.

So, we have a cooperative endeavor here among representatives of the highway patrol, the Department of Motor Vehicles, State Board of Health and the State Medical Society.

Now, for a few recommendations:

First of all, we need—and we need it now—codification of all the Society's policies and positions.

Secondly, I recommend we implement the Medical Education Committee and its recommendations.

Third, stimulate more local participation in the Regional Medical Program.

Four, implement the North Carolina Medical Society Foundation. You may not have heard about this. It is now a fully approved entity. All it needs is money! We need a fund-raising campaign.

This Foundation has great potential.

Next is to simplify the present Department of Public Welfare payments program for categorical recipients.

Next, continue our efforts to achieve a more satisfactory understanding with the Workmen's Compensation Commission.

Now, this next one is one I had intended to do this year and I admit candidly this is one thing I didn't get to. There seemed to be a series of more major crises and so on erupting quite frequently which prevented my calling a meeting of all the presidents of all the specialties in the State. We want, of course, to bring them into a closer working relationship with our State Society.

Last year, in my address, I issued an invitation for them and some of them have responded. They are willing and ready.

We will be in a better position to do this when our new building is completed, but the groundwork can be laid first.

I have mentioned to you the necessity for the Executive Council meeting more often.

Other recommendations will come as a result of

the headquarters operation study by the management firm.

So, in conclusion, I want to express my hearty thanks and appreciation to my fellow officers, for their faithful, diligent and effective performance. They have responded, without exception, to many requests to attend meetings, to cover meetings that I have made. It has been possible for one, two, three or even four men to get to all these meetings.

To our staff for their strenuous, conscientious endeavors and their splendid cooperation in meeting numerous minor and major emergencies.

To the members of the Executive Council for a high level of attendance, discussion, decisions and devotion to duty and to all committee chairmen and participants.

Finally, my very deep appreciation to every member of this House, every member of the Society, for the privilege of serving as your President.

[Whereupon President Welton was then accorded a standing ovation from the entire assemblage.]

SPEAKER OF THE HOUSE: Thank you, Dave, for your expected excellent report.

His speech, of course, will go to the Reference Committee on President's Addresses, which I will not announce at the present time in deference to the timing of our next speaker, who has an executive council meeting of her group at three-thirty.

I would like very much to give a long introduction to this most delightful person, but she does have a rather short schedule.

I don't think anybody in this group needs to be introduced to Mrs. John L.—or better known as Betty McCain, President of our Auxiliary and it gives me a great deal of pleasure to bring her to the rostrum.

[Whereupon Dr. Koonce then escorted Mrs. McCain to the podium, while the entire assemblage accorded her a standing ovation.]

MRS. JOHN L. MCCAIN [President, Women's Auxiliary to the Medical Society of the State of North Carolina]:

Thank you, so much.

Dr. Welton, Dr. Koonce, Dr. Davis, Members of the House of Delegates of the Medical Society of the State of North Carolina, my patient friend, Jim Barnes and Guests:

You do me singular honor in allowing me to report to you on the affairs of your Auxiliary, an honor which I appreciate immensely.

It is our earnest wish that we could express to each of you personally our very real gratitude for your continued interest in, generous financial help to, and your cooperation in our program.

Your efforts on our behalf have enabled us to enjoy a most successful year and to each of you, we say a heartfelt, "Thank you."

Our theme for the year 1968-1969 was "Ambassadors for Health", and we have sincerely tried to be good ambassadors, a vital and helpful part of medicine's diplomatic corps., effective emissaries of the medical profession.

Since all ambassadors have portfolios, we have accomplished this through a "Portfolio of Projects," stimulated by unmet community needs and geared to the strength and abilities of each auxiliary.

To date, there are 2,628 such Auxiliary Ambassadors, who hail from 74 North Carolina counties, organized into 55 component auxiliaries. Nine of these are members-at-large and all have worked long, hard and very effectively.

A large and concerted effort has continued in the field of health careers recruitment and retraining.

To date, seventy local health career scholarships and loans, five new state Auxiliary student loans, from the State Auxiliary, all totalling nearly \$12,500 were awarded this year.

The Alamance-Caswell Auxiliary, which is a middle-sized Auxiliary, have already raised \$23,000 in the last seven years selling antiques to your wives!

[Laughter]

\$5,000 has been raised this year for AMA-ERF and tomorrow, at our meeting, we will auction off a painting donated to us by artist, Zeno Spence of Goldsboro, and we sincerely hope you will send your wives well supplied with the currency of the land! [Laughter]

Two statewide Suicide Prevention Workshops were sponsored last fall in an attempt to encourage the formation of crisis centers across our State. Four such centers have opened since that time and to Dr. Robert Garard and Dr. Edwin Shneidman, who led the workshops, we are most grateful.

We cooperated with the North Carolina Junior Leagues and others in the sponsorship of a Forum on "The Emotionally Disturbed Child in North Carolina."

Fifteen hundred persons attended this Forum and follow-up work has begun.

The Auxiliary's Mental Health Research Endowment Fund has almost reached the three-quarters mark on its way to \$20,000 and we helped to sponsor the pilot Cherry Hospital Symposium.

Three hundred of us, and we were so glad to have Dave Welton and others with us, attended a second "Day in the Legislature" in March.

The day was highlighted by a briefing from your Legislation Committee, a visit with Governor Scott at which time he officially proclaimed "Doctor's Day," a visit to the General Assembly and a tour of the Executive Mansion and tea with Mrs. Scott.

All fifth grade teachers in the State were invited to two Family Life Education Workshops held in Winston-Salem and sponsored by your State Auxiliary and the Forsyth-Stokes Auxiliary. Nearly 300 teachers from across the State, from thirty counties, representing 54 per cent of the school population, attended.

Six organizations, including your Auxiliary, sponsored a public education project urging everyone to carry emergency medical identification.

We petitioned your Headquarters Facility Committee for "room in the Inn" and you have assured us that there will be a permanent home for us in the new building and we are immensely grateful for this.

Only the rigors of his Wisconsin up-bringing pre-

served your esteemed President from freezing to death when we opened the Country Doctor Muesum, the only purely medical museum in the nation, outdoors in 17-degree weather on December 8th. We hope that you will visit this.

And, there is much more, but we hope that you will consult the April NORTH CAROLINA MEDICAL JOURNAL or our own 77-page Annual Report, which was sent to your officers and Councilors for a more comprehensive summary.

And, so, gentlemen—and ladies, too—we sincerely thank each of you for your wonderful wives who work so tirelessly in your behalf and for each and everything you do to help us.

Our greatest honor is to be the Auxiliary to the Medical Society of the State of North Carolina and our only hope is that our efforts are worthy of the name we so proudly bear.

Thank you, so much.

[Whereupon the entire assemblage then accorded President McCain a standing ovation.]

SPEAKER OF THE HOUSE: Thank you, very much, Madam President, and may your executive committee be most successful.

I would like to now make a few announcements.

Reference Committees are constitutionally appointed by the Speaker and Vice Speaker of the House and are as follows:

Committee I: Dr. Philip Naumoff, Chairman, Ernest Larkin, and Otis Duck. They will meet in the Cardinal Ballroom of The Carolina at two o'clock tomorrow afternoon.

Committee II: will meet in the TV Lounge at the same time; Dr. Jack Hughes, Chairman; Thomas C. Worth and A. B. Croom.

Committee on President's and Officers' Addresses:

Marvin N. Lymberis, Chairman; Frank R. Reynolds, and Harry H. Weathers.

As you know these Reference Committees will meet tomorrow. We have been unfortunate in the past because we've had to meet on Sunday night after a hard day's work in the House of Delegates, but still I think tomorrow afternoon is a much wiser time and we are very grateful to the program committee for the arrangements they have made.

I may be a little out of order but I can't help but say this—so many people say, "Why pick a time like that? It's inconvenient so far as our golf game and several other things!"

We do come up here for fun and companionship, but we also come up here for business and very serious business; the more serious as we go along every year.

And, I think these Reference Committees are the very center and core of our legislative actions as far as our House of Delegates are concerned and I think that's the place where every member of the State Medical Society can be heard and argue their point of view on all things that are presented to this House of Delegates.

It has been said, I think unjustly, that the average member of the State Medical Society cannot be

heard, but that is no longer true. If he's interested enough to come to this meeting and go before the Reference Committees, he can and will be heard.

So, I think these things are important enough to give up a golf game or some other function, even if it's medical education and I'm very glad that we have the time which I think can be spent and spent adequately on this.

Now, if you'll remember in my closing remarks last year, I made a few comments which unfortunately I can't live up to entirely.

One was that every member of the House of Delegates would be furnished with a copy of the Constitution and By-Laws. Through negligence on my part, I did not investigate this until too late and found out that Mr. Barnes did not have the authority to publish that much volume. I requested that from the Executive Council yesterday and I'm sure it will be granted, that sometime in the near future, all members of the House of Delegates will have a copy of the Constitution and By-Laws; those who request it can have it now and that those new members as they come along each year will get such a copy.

I also promised you a copy in reference to the parliamentary procedures of Reference Committees, as is stated in Sturgis Standard Code of Parliamentary Procedure. For your information, that is in your group of informative papers. We did get that and I hope it's printed well enough so you can see it.

I think it will be educational and will show you just how these function and will show you how necessary it is to have these Reference Committees and the mandate to a Reference Committee that every part of business that is referred to it has to come back to this group with a recommendation of some sort.

Next, you have a Supplementary Report of the Committee on Constitution and By-Laws; report of the ad hoc Committee on Medical Education; report of the ad hoc Committee on Relationship to North Carolina Blue Cross-Blue Shield.

A list of resolutions, listed by letter rather than number. These are the resolutions that went to the Executive Council because they were resolutions from committees of the Executive Council and because they came in after the fourteen day limit.

Report of the Council on Planning and a report of the Committee on Legislation.

Do you all have these? [No response]

Now, again, as part of information of procedure, if you'll remember in the last few years, the business of this Society has been carried on through Reference Committees. At this first day's meeting, business will be presented through the reports of the Executive Council or by resolutions. There will be no discussion from the floor today.

There will be a report from Dr. Welton as Chairman and member of the Executive Council to show you the actions the Executive Council may have taken yesterday or prior, on matters. That will be for your information. There will be no discussion from the floor.

These will be referred to the Reference Committees and I'm awfully sorry that you do not have a copy of the references of these different matters, but I will announce them as we go along. I'm sorry, but these girls worked until well after midnight last night getting what they did for you and I will be the last one to criticize.

Now, how democratic is that?

Something comes up here and I refer it to a Reference Committee and that's the end of it! That's not the end of it.

As I said before, your Reference Committees are wide open to any member of the State Medical Society, not just the delegates—any member of the State Medical Society and he has just as much right to discussion in those Reference Committees as you do.

They will be listened to. They will be heard.

If there is still a question in the mind of a member of the House of Delegates, now, when we come back on Tuesday, you have a right to bring it before the floor and by invitation or approval by members who are not members of the House of Delegates.

So, full discussion will be granted and please don't be hesitant.

Now, on the question of new business, any new business that comes before this session, and you see there's none listed, will have to come by two-thirds vote of this body.

In other words, if you have new business or a resolution you want to present at the present time, if you stand when New Business comes up, I will recognize you and allow you to state your business and then I will call for a vote from the House. If two-thirds of the group agree that your business is important enough to be brought up, you can then present it and it will be referred.

Now, are there any questions about simply procedural matters? [No response]

(At this point Vice Speaker James E. Davis assumed the podium.)

DR. JAMES E. DAVIS [Vice Speaker of the House of Delegates]: We are privileged to have with us this afternoon, the President of the North Carolina Association of Medical Assistants and I recognize Miss Anne McClure.

MISS ANNE MCCLURE [President, North Carolina Association of Medical Assistants]: Mr. President, Mr. Speaker, Members of the House of Delegates, Guests and Friends:

On behalf of our Association, I say thank you for giving us the privilege to tell you just a little bit about what we are about and what we are doing in North Carolina, and to bring to you the very best wishes for a very successful meetings from our Association to yours.

The North Carolina Association of Medical Assistants is a state chapter of the American Association of Medical Assistants, comprise the paramedical personnel employed by a physician or in an administrative or technical position in a hospital.

There are 250,000 medical assistants working in doctors' offices and hospitals in the United States. Less

than one-third of these women have had any formal training.

A tribute to the dedication of your medical assistant is the fact that so many have learned the art of giving good medical service on their own.

It has been said that if a woman can be a sweetheart, a valet, an audience, a cook and a nurse, she is qualified for marriage!

You can paraphrase and describe a medical assistant.

A nurse, a psychologist, a receptionist, a bookkeeper, a stenographer, medical and personal secretary, social worker, housekeeper, purchasing agent, possessing a smiling face, a gentle disposition, a sympathetic manner, the wisdom of Solomon and the patience of Job! [Laughter]

A woman who can claim all these attributes is a professional and she deserves the same respect and honor accorded to others in allied medical professions.

We are all aware of the sharp criticisms of the women who work in your offices. We have been called everything from battle axes to bouncers, and I'm not kidding!

The story is told of a man who was still blasting his doctor's physician assistant when he reached the Pearly Gates. St. Peter couldn't find his name on the reservation list and cursed again quite vehemently.

Finally, St. Peter looked at him and said, "You're not due yet. Who's your doctor?"

"Don't blame the doc!" came the spirited reply, "It's that shrew in his office! I always knew she would put me off too long just once too often!" [Laughter]

The truth, however, is that in too many instances untrained medical assistants have been guilty of more public relations than we would care to admit.

The medical assistant, properly trained, is in short, pure public relations, but where in today's society is the physician, even if he has the time, to instruct his staff in mastering dictating machines, accounting procedures, collections and credits, insurance and industrial commission forms, social security and taxes, telephone technique, reception room control, punch-card patient histories, automated billing, the forthcoming complexities of computerized central record control, to say nothing of the least of Medicare or Medicaid?

Or, where is the doctor today who can find the time to tutor his staff on terminology, anatomy, physiology, how to prepare patients for examinations, how to do EKG's, to take blood pressures, teach public and professional ethics, or even how to do a little correspondence?

Every physician should know by now that he does not have to give this time to his medical assistant if she is an active member of the Medical Assistants Association.

Public relations then, we all agree, is best performed on the person to person level and whether you admit it or not, your first impression of the public which we serve is through your front office, your medical assistant.

We are not a union.

Our Constitution reads:

It is not nor shall it ever become a trade union or a collective bargaining agent. Any member who attempts to project such, automatically forfeits her membership for life.

Each year has brought progress including increased approval from you, the medical profession.

Since the only real justification of our Association is the improvement of medical assistants' performance on the job, education has become a by-word. On every chapter of NCAMA you will find a continuous education program going on, updating the medical assistant and her profession.

The ultimate aim of our Association is education for all and certification, thereby giving better health care, fostering better public relations and becoming more recognized as a professional member of the health team.

We are in the process of setting up a two year program for training medical assistants. AAMA has an approval program very similar all over the United States so that we can recommend places of training and train those who will follow after us.

It is estimated that by 1971 there will be a demand for at least 300,000 allied health workers. AAMA is blazing the trail so this need may be reached.

Your interest and your support of NCAMA is a must if we are to complete the task before us. Will you not encourage your medical assistants to join us?

Thank you. [Applause]

VICE SPEAKER OF THE HOUSE: Thank you, Miss McClure.

The entire medical profession of North Carolina has been honored during the past year by having one of our very own medical students serve as president of Student American Medical Association.

We are particularly proud that Mr. Lucas can be with us today and it's an honor to recognize from the University of North Carolina School of Medicine, Mr. Clement Lucas, immediate past President of SAMA.

[Applause]

MR. CLEMENT LUCAS [Immediate Past President, SAMA; University of North Carolina School of Medicine, Chapel Hill.]: Mr. Speaker, President Welton, President-elect Beddingfield, and Members of the House of Delegates of the Medical Society of the State of North Carolina:

On behalf of the 60,000 medical students, interns and residents of the Student American Medical Association and especially those from the three medical schools in North Carolina, it is indeed an honor and a privilege for me to be here with you this afternoon and to bring you greetings.

More importantly, I would like to take this opportunity to express to each and every one of you our personal appreciation and sincere gratitude for all of the assistance and guidance that you have so kindly rendered to the medical students of this State and of this nation.

Without the help of practicing physicians, medical students would not have the opportunity to be here

this weekend and this week to meet with you and learn more about the other aspects of medicine that is not taught in the teaching complex, nor to have the opportunity to take part and experience valuable externships, nor to have the opportunity to have viable and meaningful medical student organizations in which to promote the future of American medicine.

For all of this help and support, we are extremely grateful. Through your support, we are continuing to build the private enterprise system of medicine that all of us so strongly believe in.

In the past two years, because of the increased activity of medical students in trying to help you build a stronger and a better medical care system, a new entity known as "medical student activism" has arisen and, although in the most part, this has been well intentioned, I believe in some areas it has been severely misunderstood.

Because I feel this activism has been misunderstood and misinterpreted, I would like to take a few moments to explain as best I can just what I think has been happening.

Student activism is nothing new to the world.

Socrates, Aristotle and Jefferson were activist students and played vital roles in the founding of new societies. Whenever a society has lost its student activism, it has failed.

Not only did the Ancient Greeks and the Ancient Romans decay from without, but they became stolid and withered from within. They lost the ideas in the fervor and the zeal of their youth.

Today, I believe England is a living example of this.

In our present society, we have never really liked students who assumed activist and constructive roles. In the early pilgrimages from North America and to Europe, ships were filled with students who were seeking a new world in which to make their fortunes.

From the record migrations toward the Northwest Territory to the depression of the 1930's, students have been actively involved in society in many areas, in a most constructive manner.

Since the end of World War II, with the rapid growth and development of literally thousands of universities and community colleges, students in increasing numbers have become stimulated and have been inspired to find their role in determining the future of our society.

It is a well known fact that this activism has rapidly spread throughout the ranks of all students in the U. S. today. Earlier this was perhaps more clearly articulated by the students in the humanities, but today with a more enlightened and well grounded basic preparation of medical students, the changing of medical curriculum and increasing elective time, even medical students are finding time to involve themselves in deep reflection and, as a consequence, in this very active expression of their ideas and their beliefs.

What is it that causes a medical student to assume an activist's role and to become identified as being an activist?

I sincerely believe, for the most part, they are concerned with the very same things that you are.

Students come from communities in which there is not effective delivery of health care, in which there is high infant mortality and in which there are few physicians and you know it well.

They go to medical school emblazoned with the fervor to find some answer in getting health care back to the people and upon entering medical school, provided he's that fortunate and that he's rated the MCAC scores, or his color doesn't keep him out, the student enters with the hopes of returning to his community to practice medicine on an individual and on a personal level.

However, upon entering medical school, this idealism is soon blunted. The student is confronted with long years of specialization, based upon medical school research. He hears his professor saying in the halls of the medical school that there is no longer any need for family practitioners while he is in fact taught by those who have never practiced medicine.

The enlightened medical student is not only concerned with the educational processes that deny him his development as a total physician, but he is chagrined at the negation of responsibility by the medical school complex in reaching out into the communities in this state and in this nation to deal with health care.

He sees the medical school not as a force seeking to improve the total care of this country, but as "the establishment" which seeks to perpetuate itself by adding another research project and another professor in order to get more funds from the government.

He sees the medical school as trying to institute the new Division of Community Medicine with no real understanding of what the total community is—much less what total medicine is.

Additionally, he is concerned with those who cry for a two year medical school when he knows this is perfectly obsolete and what is more, the two year medical school is what keeps him furthest from seeing the patients and developing care on a personal level.

Additionally, statewide committees are politically appointed to improve medicine, to design health care delivery systems, but student opinions are never invited.

These are the concerns of medical students and these are the problems that students of medicine see. Because of these concerns, medical students throughout this state and throughout this nation have assumed activist roles in producing political efforts—speaker programs, service projects, publications, campaigns to increase minority group enrollment and summer programs to place students in Appalachia and on Indian reservations as well as to work with the mentally ill and most of you are aware of many of these efforts through the auspices of the Student American Medical Association.

These are the concerns and these are the actions of medical students—the same as yours and the same

as mine. These are the efforts that have generated the new entity known as medical student activism.

I trust most sincerely that you will not fear these efforts or these students. They are interested in the future of American medicine just as are you.

When the going gets tough and when the future gets bleak, these are the students that will be by your side. They will be by your side in the operating room, in the emergency room, in the office and in the public and political arena.

They are dedicated to the future of our free system of medicine and to the private initiative of each individual. They do not support a national health service, or socialized medicine, but they do support the right of every person to receive adequate medical care.

These are the students who support you and who will serve as the future foundation for American medicine.

You need have no fear or have any worry because these students are dedicated to the preservation of our nation, of our institutions and of our medical systems.

They are not among those who seek to destroy and mutilate our institutions and our way of life. They merely seek in a constructive way to try to improve and offer solutions to some of the problems that are so foremost in all of our minds.

They seek to become actively involved in the problems of our times, as indeed the noted author, Max Lerner, has suggested we do.

I trust that each and every one of you will continue to support these students; students who are the strongest supporters you have in this state and in this nation and in this world.

If at times you do not agree with their philosophy and actions, then do not dismay. They will not always agree with you, but the fact remains that healthy, constructive, dissent and criticism with rational alternatives remains the basis for the future of our society and our country, and this can only come about through responsible discussion among all concerned parties.

As you continue to meet students this week and throughout the years, you may rest easy and have no worries. These are the responsible students who are willing to work with you in every possible way. They have received your generous support and gracious support throughout the many years that the State Medical Society has been assisting students in the medical schools and I believe that these students deserve to continue receiving your support.

They only seek to be involved and I challenge you to find more ways to include them in your discussions. I believe there are several ways this can be accomplished.

I believe the Medical Society should actively campaign to get student members in the three medical schools of this state and involve them in your discussions and in your actions.

Secondly, I would hope that you would follow the lead established by the State of Colorado and its

Medical Society in allowing student members to actively engage in your deliberations and discussions and in all of your committees and in all of your councils.

America needs the voice of medical students in the affairs of medicine and, for too long, they have been disregarded.

And, thirdly, I believe the students should be involved in statewide health planning efforts, in activities like Comprehensive Health Planning, Regional Medical Planning, Title XIX and the future planning of the health care systems of this state.

These are the things that students need to be involved in. It is important to become involved and to offer constructive alternatives. It is important to actively participate in helping to find solutions to our problems.

Most of you are aware of our social problems and are aware of the systems by which quality health care is delivered to Americans leaves much to be desired.

Most of you are aware of our ghettos, the lower, the middle and the golden.

Our concerns are many. Our concerns are real.

The problems they pose are with us today and I think all over the world we'd like to solve them now if possible, but at the same time, I say to you there are many persons like yourselves who have worked to do the same for years.

We, as students, hold no patent on dissatisfaction and protest. Solutions can and are being found. However, solutions to these difficult health and societal problems do not lie with the total destruction of the institutions built up over many years to provide care and to work for the betterment of all society.

Indeed, the solutions that we all desire will be best achieved through institutional change and improvement.

This does not mean, as students, we should passively accept things as they are, or that we should patiently await change as others see it.

We have the responsibility and the opportunity to seek new solutions, to question old ways and to articulate forcefully our plans and our hopes and our ideas and our zeal for the future.

To do otherwise, would be contrary to our purpose here on earth and in our society.

We cannot be satisfied until our nation can provide for the health and societal needs of every man, woman and child with justice, honor and dignity.

Education, health, political concern and community action—these are our priorities; to be relevant and effective is our ambition; peace, prosperity and a just society for all is our goal; and responsibility is our dedication.

Our cause is a just and an honorable one and our course lies ahead. Our destiny is our future and we must strive towards the day when our society is a just and an honorable one for each and every citizen.

As Senator Robert Kennedy pointed out in many parts of the nation, to those he touched and to those

who sought to touch him, "Some men see things as they are and say 'Why'? I dream things that never were and say 'Why not?'"

With our sincere dedication and hard work, why can we not continue to attain the things of which we dream and indeed of which every man, woman and child desire to be a part of?

It is our duty to light the flares of the future and be more than blurred footsteps in the sands of time. Working together we, as students, can succeed. Working with you and working with many others, we can build a just society and we can treat effectively the ills of our society, and working together, we can attain the goals we mutually seek.

Thank you, very much. [Applause]

VICE SPEAKER OF THE HOUSE: Thank you, very much, Clem for this forthright and challenging message.

We do welcome you, Mr. Fisher, Mr. Hoover and the others of your colleagues (in SAMA) at these meetings and we hope that you will be active participants in as many sessions as possible.

I'm sure I might speak for the entire Society to say to you that we do support you and your activities and that we are anxious to work with you to find ways in which the physicians and the students might work together more effectively.

All of you have received in your pre-meeting packet a Compilation of Annual Reports. These reports will not be read, fortunately, but I will recognize such individuals for possible amplification.

First, our Constitutional Secretary, Dr. Charles Styron!

SECRETARY STYRON: My report is in the Compilation. I have no further remarks to make.

VICE SPEAKER OF THE HOUSE: Dr. Styron, has no further remarks.

May I have a motion that his report be accepted?

[The motion was made and seconded from the floor.]

All those in favor say "aye"; opposed "no".

It is accepted.

As he mentioned, the audit report for 1968 is included in this compilation and there are persons present who can effectively answer any questions.

Do you have any questions concerning this audit report?

(No response)

If not, may I have a motion that this report be accepted?

(The motion was made and seconded from the floor.) It has been moved and seconded that this report be accepted.

All in favor please say "aye"; opposed "no".

It is accepted.

As is aware to all of us, we are particularly blessed in having the Executive Director and Assistant Executive Director and his staff who work so effectively for us.

Mr. Barnes, would you have any remarks on your report?

MR. JAMES T. BARNES [Executive Director of the

Society]: Mr. Chairman, the report is in the printed Compilation and the only thing I would call to your attention is the annual audit report of the Society's fiscal affairs for 1968 contained therein and it's usual that the House of Delegates act on that report.

VICE SPEAKER OF THE HOUSE: Thank you, sir.

May I have a motion that Mr. Barnes' report be accepted?

[The motion was made and seconded from the floor.]

All those in favor say "aye"; opposed "no."

It is accepted.

As he mentioned, the audit report for 1968 is included in this compilation and there are persons present who can effectively answer any questions.

Do you have any questions concerning this audit report?

(No response)

If not, may I have a motion that this report be accepted?

(The motion was made and seconded from the floor.)

It has been moved and seconded that the audit report be accepted. All in favor please say "aye"; opposed "no."

It is accepted.

Now, to the reports of ten Councilors.

As Councilor for each Medical District, as called you may add to the report of your District.

(Each Councilor on call indicated no addendums.)

VICE SPEAKER OF THE HOUSE: There being no other report, other than those published in your Compilation, may I have a motion that these reports be accepted?

[The motion was made and seconded from the floor.]

It has been moved and seconded that Councilors' reports be accepted. All those in favor say "aye"; opposed "no".

They are accepted.

As to the reports of the five Commissioners, published in the Compilation are there additional reports?

(The Commissioners responded by indication of no addendums)

DR. PHILIP NAUMOFF [Chairman, Commission V]:

VICE SPEAKER OF THE HOUSE: Dr. Naumoff?

DR. NAUMOFF: All the reports of this Commission are in the Compilation with the exception of the report of the Committee on Legislation which has been passed out and, therefore, there are no further reports.

VICE SPEAKER OF THE HOUSE: Thank you, sir.

May I have a motion that the reports of the Commissioners be received?

[The motion was made from the floor.]

Is there a second?

[The motion was seconded from the floor.]

All in favor please say "aye"; opposed "no".

They are received.

I now call on Dr. Poteat, Chairman of the Committee on Legislation.

DR. POTEAT: Mr. Speaker, Members of the House of Delegates:

Submitted herewith is the report of the Committee on Legislation of the Medical Society of the State of North Carolina.

This being a year for the meeting of the North Carolina General Assembly, a great many matters pertaining to medicine have been dealt with by your Committee on Legislation in consultation with and assistance from the President, President-elect, Legal Counsel, the Executive Director and members of his staff.

Many of these matters have developed in the past two months and many more are still pending, hence the necessity for this report at this time and the explanation for it not being included in the Compilation of committee reports.

This report will be relatively brief but the members of the committee will be available for more detail should that be desired.

The only bill sponsored by the Medical Society, entitled the Anatomical Gift Act, was prepared, introduced passed and is now the law in North Carolina. The Legislative Committee wishes to acknowledge with sincere appreciation the efforts of an ad hoc committee consisting of Dr. Delford Stickle, Dr. R. P. Hudson and Dr. L. B. Holt who quarterbacked this measure to its successful conclusion.

The Highway Safety measures, together with the drunk driver legislation was enthusiastically supported and while final disposition has not been made, it is reasonable to expect that the implied consent element (this having to do with Breathalyzer and blood alcohol level determinations) will be enacted prior to adjournment of the legislature.

The Osteopath bill has been perhaps the most controversial with which we have had to contend. There is great difference of opinion even in our own circles relative to this matter.

Upon advice and consent of the Executive Council and the Board of Medical Examiners our position has been that osteopaths who have graduated since 1960 may apply to the Board of Medical Examiners for permission to write the Board's examination and upon successful completion of the examination may be licensed to practice medicine in North Carolina.

The bill also contains a provision that an osteopath be placed on the Board of Medical Examiners. We have endeavored to have this provision withdrawn. However, the House passed the measures and it is now pending in the Senate. There is reason to believe that the Senate will delete this provision.

As you doubtless know, all medical schools in the United States (including the three in North Carolina) are in dire need of financial aid and to that end, the Medical Society has supported the recommendation of the Board of Higher Education to the effect that adequate financial support be allocated to University of North Carolina Medical School to the degree that its classes may be enlarged from the present 75 to 200 by 1975.

Further, that the State of North Carolina subsidize Duke Medical School and Bowman-Gray Medical School the amount of \$3,250 per year per North Caro-

linian admitted, \$1,000 of which is to be applied to the student's tuition and the other \$2,250 is a grant to the schools. In this way, it is hoped more North Carolinians may be admitted and thus more doctors produced to practice medicine in North Carolina.

Opposition has been mounted to the efforts by the chiropractors to be eligible to recover fees under various health insurance plans.

Support has been given to the physical therapists, the Hospital Association, Mental Health organization, and the Nursing Association in various matters relating to their disciplines.

The Medical Society has introduced testimony to various committees of the General Assembly relative to the implementation of Title XIX. This matter is presently in the hands of the appropriations committee and at this time no indication has been given as to its disposition.

The Corporate Practice Act, relative to the corporate practice of medicine and other professional groups is also in committee and there is reason to believe that it will be favorably reported and favorably acted upon.

Respectfully submitted, Robert A. Ross, John Dees, and Hubert M. Poteat, Chairman.

Mr. Speaker, I move you the acceptance of the report.

VICE SPEAKER OF THE HOUSE: Thank you, Dr. Poteat.

Is there a second to the motion to accept the report?

[The motion was seconded from the floor.]

All those in favor please say "aye"; opposed "no".

The report is accepted. Thank you Dr. Poteat.

I'll now call on our President, Dr. David Welton, for a report on the actions of the Executive Council.

Dr. Welton!

PRESIDENT WELTON: I believe Mr. Vice Speaker, you are referring only to the legislative report.

VICE SPEAKER OF THE HOUSE: Yes.

PRESIDENT WELTON: First of all, I wish to apologize to Dr. Poteat.

In listing the people who have spent a lot of time and effort in legislative halls and offices, I neglected to mention his name. He is also a member of the North Carolina Board of Higher Education and has served very effectively there and has been very helpful in obtaining the North Carolina Board's sponsorship of one of these important bills.

There were two other bills presented to the Council yesterday. At the request of Dr. Poteat, Mr. Anderson presented these.

They refer to payments under Workmen's Compensation Commission.

One is Senate Bill 578 and the second is a bill proposed by the North Carolina Hospital Association, which as I understand it has not yet been introduced.

The Council's action was as follows on these two:

A motion that both bills be opposed; amended to include, with the exception that we could support the

bill sponsored by the Hospital Association if it were amended to provide payment for physician's services at usual, customary and reasonable rates and with an inclusion of the definition of these terms as promulgated by the American Medical Association.

This was the information and action that the Council wished reported to the House.

VICE SPEAKER OF THE HOUSE: Thank you, Dr. Welton.

This report will be referred to Reference Committee II, with the Speaker's permission.

Are there reports from related organizations?

[No response]

SPEAKER OF THE HOUSE: The next thing on our agenda is the Committee on Constitution and By-Laws, Dr. Shaffner, Chairman!

DR. SHAFFNER: Mr. Speaker, the report of the Committee on Constitution and By-Laws, you have it in your folder, the white copy.

There's one change in the Constitution to be voted upon this year. It was presented initially last year, May 1968 and it's up for a final vote requiring a two-thirds majority for enactment.

It deals with procedure to amend the Constitution and is as follows:

Amend Article XIII of the Constitution by inserting in sub-paragraph (1) after the word "presented", the following words: "... and accepted for consideration by a majority vote."

Sub-paragraph (1) will then read as follows:

That such amendment shall have been presented and accepted for consideration by a majority vote in open meeting at the previous annual meeting and that it shall have been sent officially to each component society or printed in the official publication of the Society at least two months before the session at which final action is to be taken, or . . .

Mr. Speaker, I move the adoption of this amendment to the Constitution.

SPEAKER OF THE HOUSE: His motion is in order. He's a member of the House of Delegates and coming from his committee, it needs no second because there are enough members of the committee in the House of Delegates to act as a second.

Now, if you'll remember from your parliamentary procedure, the chairman of a committee can move action on a recommendation. However, action on the committee's report as a whole, the motion has to be made from the floor.

Now, is there any discussion of this motion?

[No response]

If not, those in favor let it be known by saying "aye"; opposed "no".

So be it.

Dr. Shaffner, in his usual meticulous way asked me if I want to declare that as two-thirds because it takes two-thirds. Since I heard very few "noes", I will declare a two-thirds.

DR. SHAFFNER: Several changes in the by-laws are recommended. These may be discussed and amended at this meeting, but must lay upon the table until the

second meeting of this House on Tuesday, May 20th, when the final vote may be taken.

Proposed changes in the By-Laws:

Item 1: To clarify organization of delegates to the AMA House of Delegates.

Delegates and alternate delegates of the Society to the AMA House of Delegates are elected for terms of two years, one-half being elected each year. The present By-Laws do not stipulate how this delegation shall be organized and this change will so stipulate.

Amend Chapter IV, Section 8 of the By-Laws by deleting from the first sentence the word "representative" and inserting in lieu thereof the words "society members as delegates and alternate delegates" and by inserting an additional sentence so that the section will then read:

It (North Carolina House of Delegates) shall elect society members as delegates and alternate delegates to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body. Before each meeting of the AMA House of Delegates, the delegates shall designate one of their number as Chairman of the delegation and shall select from the list of alternates such number to vote as may be necessary so that the Society will be fully represented. The Executive Council shall have the authority to fill for the unexpired term any vacancy that may occur between elections.

SPEAKER OF THE HOUSE: If you'll remember, our present standing is that amendments to the Constitution and By-Laws on the first reading are presented but not voted on.

You just voted on the Constitution which will change that, but as of the present reading (by-law) it doesn't need a motion, but the floor is open for discussion.

Any discussion of this? [No response]

If not, it will be brought back Tuesday for final reading.

DR. SHAFFNER: Item two has been revised.

Will you look upon the Supplementary Report which is the green sheet that was given to you separately?

Item two is to set up a new Commission.

Because of the increasing number and variety of government financial health programs, such as Appalachia, Comprehensive Health Planning, Regional Medical Program, etcetera, it seems advisable to designate a new commission under which may be grouped the various committees of the Society dealing with these programs.

The following is recommended:

Amend Chapter X, Section 1 of the By-Laws by adding a new Commission entitled, "Developing Government Health Programs Commission."

SPEAKER OF THE HOUSE: Is there any discussion of this presentation? [No response]

If not, it will lay upon the table until Tuesday to be voted on at the final reading.

DR. SHAFFNER: Item three and four deal with information which you will receive later this afternoon

and rather than mention them now, they will be brought back to you as other recommendations of this committee when the time comes.

SPEAKER OF THE HOUSE: Thank you, Louis, for your usual, very fine report. They do an awful lot of work and are entitled to a great deal of confidence and appreciation of this whole House.

As he stated, those other two items from the Constitution and By-Laws Committee will be brought up in their proper place.

The purpose of doing it in this manner is that when these other two items, Blue Cross ad hoc Committee and the other, is brought up then there will be a change in the by-laws presented to you at the first reading and then the whole business of those two items will be sent to a Reference Committee.

The Reference Committee may come back advising that the action of the By-Laws Committee or that the report of the Committee not be accepted and, therefore, the changes in the By-Laws do not have to be accepted at the next reading, but we have to present them today so that they can be ratified on Tuesday.

I hope that explains it.

The next thing is the report of the Nominating Committee, President Welton!

PRESIDENT WELTON: Mr. Speaker, before I open this report, I want to correct an announcement I made previously concerning the Student AMA dinner on Monday evening.

The students told me they would like to have anybody and everybody who wants to come to it. I neglected to ask how many reservations were left and the answer is—there are still fourteen tickets available! [Laughter]

There is also a MEDPAC dinner tomorrow evening which you might want to know about.

It's my pleasure now to open before you the report of the Nominating Committee—[Whereupon President Welton then slit open the envelope holding the report.]

Do you wish me to read it, Mr. Speaker?

SPEAKER OF THE HOUSE: Yes, please.

PRESIDENT WELTON: It is addressed to me as President and says:

The Nominating Committee of the Medical Society of the State of North Carolina met on April 27, 1969, and unanimously selected the following slate of officers for nomination:

President-elect: Dr. Louis Shaffner;

First Vice President: Dr. Robert Perry Crouch;

Second Vice President: Dr. Rose Pully;

Speaker of the House of Delegates: Dr. James Evans Davis;

Vice Speaker of the House of Delegates: Dr. Chalmers Rankin Carr;

Delegates to the American Medical Association: (2 year term beginning January 1, 1970):

Dr. Elias S. Faison; (subsequent deceased)

Dr. Amos N. Johnson.

Alternate Delegates to the American Medical Association (2 year term beginning January 1, 1970):

Dr. John Glasson;

Dr. Edgar T. Beddingfield, Jr.
North Carolina Medical Care Commission (Four year term):

Dr. J. Street Brewer.
North Carolina State Board of Health (Four year term):

Dr. Joseph S. Hiatt, Jr.
Dr. Jesse H. Meredith.
Board of Trustees, North Carolina Blue Cross Blue Shield, Inc. (Four year term):

Dr. Marvin N. Lymberis;
Dr. Kenneth D. Weeks.
Retirement Saving Plan Committee (Three year term):

Dr. Jesse Caldwell
Dr. John R. Kernodle
Dr. Leonard Palumbo.
Vice Councilor of the 6th District: Dr. John W. Watson, of Creedmoor.

The Nominating Committee would like to express appreciation to Dr. Donald B. Koonce for his long, faithful and diligent service to the Medical Society while serving as Speaker of the House of Delegates.

Respectfully submitted:

Charles B. Wilkerson, Jr. Chairman;
John A. Payne, III
Simmons I. Patrick
E. Thomas Marshburn
James A. Maher
Bruce B. Blackmon
Forest M. Houser
W. Joseph May
Clyde R. Hedrick
Michael F. Keleher

SPEAKER OF THE HOUSE: Thank you, Dr. Welton.

That is the report of the Nominating Committee for the different offices. To make this completely democratic, I'm going to call for nominations from the floor for each one of these offices.

If there are nominations from the floor, of course, then the vote will be by ballot. If there are no nominations from the floor, it can be that we vote.

Are there any nominations from the floor for President-elect? [No response]

I'll run through these and we will take up any nominations from the floor as we go along. I mean, when we come to the end of them.

First Vice President! [No response]

Second Vice President! [No response]

Speaker of the House of Delegates! [No response]

Vice Speaker of the House of Delegates!

[No response]

Delegates to the American Medical Association!

[No response]

Alternate delegates to the American Medical Association! [No response]

Members of the North Carolina Care Commission!
[No response]

Members of the North Carolina State Board of Health! [No response]

Board of Trustees, North Carolina Blue Cross Blue Shield, Inc.! [No response]

Retirement Saving Plan!

DR. EDGAR T. BEDDINGFIELD, Jr. [President-elect of the Society]: Mr. Speaker, may I make a remark in connection with that?

SPEAKER OF THE HOUSE: Yes.

DR. BEDDINGFIELD: Dr. Kernodle was nominated and Dr. Kernodle indicated about a month ago and this information probably did not get to the Nominating Committee, that he would not like to have his name placed in nomination for this because in his capacity on the AMA Board of Trustees, he is on a committee of the Board of Trustees that is promoting the AMA Retirement Saving Plan and it would somewhat be in competition with our own State Retirement Plan and he felt there was some conflict of interest and he asked that his name not be placed in nomination for this.

I believe it's appropriate, Mr. Speaker, to seek a nomination from the floor for this office.

SPEAKER OF THE HOUSE: I was aware of this and I know that Dr. Kernodle cannot be here himself to withdraw that, so I'm going to rule that it's perfectly acceptable that his name in nomination be withdrawn.

Do I hear nominations from the floor for a member of the Retirement Saving Plan.

Dr. WILKERSON: Mr. Speaker!

SPEAKER OF THE HOUSE: Dr. Wilkerson!

DR. WILKERSON: Mr. Speaker, I would like to place in nomination for that office Dr. Bill Hollister from Pinehurst.

SPEAKER OF THE HOUSE: Dr. Bill Hollister.

Any other nominations? [No response]

Since there are no other nominations, I'm going to take the liberty of the Chair in substituting Dr. Hollister's name for Dr. Kernodle's and leaving it as it is, and I'll call for action later.

Do you have something else to say, my friend?

DR. WILKERSON: I just wanted to clarify the nomination for Vice Councilor for the Sixth District.

The Nominating Committee interpreted the Constitution which, as you know, has been changed for election of Councilors and Vice Councilors and I believe this change was supposed to have taken place next year whereby the Councilors and Vice Councilors will be submitted by the Nominating Committee rather than from the caucus and it was our interpretation that we should bring that name in nomination to replace Dr. Thomas Worth who was promoted to Councilor of the Sixth District and who was replaced by Dr. Jack Hughes who has served by action taken by the Executive Council until this meeting.

SPEAKER OF THE HOUSE: Well, now, I think that's perfectly all right.

Of course, on this report, it is reported as Vice Councilor for the Fourth District and that is from the Sixth District.

DR. WILKERSON: That's incorrect!

SPEAKER OF THE HOUSE: It's the Sixth District?

DR. WILKERSON: It was on the front of the envelope.

SPEAKER OF THE HOUSE: I haven't got the en-

velope.

Yes, It's on the envelope that President Welton just gave me but not where I was reading from. Now, we've got it straightened out.

The action of the Nominating Committee is perfectly constitutional. Of course, he got ahead of me. I hadn't even gotten there!

Are there any nominations from the floor for Vice Councilor of the Sixth District? [No response]

That is the end of the report of the Nominating Committee. Do I hear a motion that the report of the Nominating Committee be accepted?

[The motion was made from the floor.]

Any second?

[The motion was duly seconded from the floor.]

Any discussion? [No response]

All those in favor let it be known by saying "aye"; opposed "no".

The report is accepted.

Now, do I hear a motion that these men be elected?

[The motion was severally made from the floor.]

Any second?

[The motion was duly seconded from the floor.]

Any discussion? [No response]

If not, those in favor let it be known by saying "aye"; opposed "no".

So be it and they are duly elected.

Thank you, gentlemen.

Next comes the report of our Executive Council by our President and in his report, he will have several recommendations from the Executive Council which will be referred to Reference Committees. He will have several which are for your information only and need no action.

Dr. Welton!

President Welton: Mr. Speaker and Members of the House:

This is a report of the meeting of the Executive Council yesterday, May 17th, which was a rather strenuous meeting.

In attempting to report it to you, I feel like a mosquito in a nudist camp. I know what I'm supposed to do, but I don't know just where to start! [Laughter]

According to the agenda, the first item is approval of the budget for 1969. The budget came out of the Finance Committee. It was approved by the Executive Council at its meeting at the end of September, 1968, so I move you, Mr. Speaker, that the budget as printed on pages 66-69 of the Report of the Meetings of the Executive Council be officially adopted.

SPEAKER OF THE HOUSE: It has been moved and duly seconded by the Executive Council that the budget be adopted.

Is there any discussion of this motion?

[No response]

If not, those in favor let it be known by saying "aye"; opposed "no".

So be it! The budget is adopted.

PRESIDENT WELTON: The next item is the ad hoc Committee on Relationship with North Carolina Blue Cross and Blue Shield.

There is a copy of this report in your packet.

The action of the Council was as follows:

It passed a motion that the recommendations of the ad hoc Committee on Blue Shield be transmitted by way of the Committee on Constitution and By-Laws to the House of Delegates for their consideration and that this Council recognizes that the summary of the committee's recommendations as defined by Dr. Shaffner, comprises a fair statement of the principles enunciated by the ad hoc committee.

I'd like to call now on Dr. Shaffner.

SPEAKER OF THE HOUSE: Now, this is where some of the "nitty-gritty" stuff comes in, and the complications that we went through.

I'll call on Dr. Shaffner now to present to you for presentation only the change in the By-Laws which will be just presented to you, not discussed, referred to a Reference Committee and brought back on Tuesday for action.

DR. SHAFFNER: Mr. Speaker, this is item four on the supplementary report, the green sheet.

Our committee, after consultation with some members of the ad hoc Committee and with the Executive Council, presents the following as orderly steps to carry out the recommendations of the ad hoc Committee:

1. Continue the present Blue Shield Committee during the current 1969-1970 year until the new committee can be elected by the House of Delegates in accordance with this By-Law change.

2. Amend Chapter X, Section 16 of the By-Laws by deleting the entire wording and inserting in lieu thereof the following:

Beginning in 1970 a Committee on Blue Shield consisting of 26 members shall be initially elected by the House of Delegates, 8 members for one year, 8 members for two years, and 10 members for three years, so that in the first year there will be two members from different medical districts and with different terms of office representing each of the major practice specialties; namely, surgery, internal medicine, obstetrics and gynecology, pediatrics, ophthalmology and otolaryngology, general practice, neurology and psychiatry, radiology, pathology, anesthesiology, orthopedics, dermatology and public health and education. In each succeeding year the House of Delegates shall elect for a term of three years new members representing the several specific specialties necessary to replace those whose terms expire that year. A member may be re-elected to the committee only after he has been off the committee two or more years. Each year the committee shall select one of its members as chairman who shall be eligible for re-selection to that position during his three year term.

It shall be the duty of this committee to advise and counsel with the membership on all matters relating to claims or any other business they may have with the North Carolina Blue Cross and Blue Shield, Inc., to inform the physician members of the Board of Trustees of that corporation of any matter deemed worthy of consideration and action

by that board and to advise and counsel with representatives of that corporation on any matters of mutual concern. The committee may organize itself into subcommittees for claims review and other activities and may meet as often as advisable, but the whole committee shall announce and hold each year at least four open meetings at which any member of the Society may present items for consideration by the committee.

That's the end of the proposed By-Law.

As with other elective offices, boards, or committees, nominees will be selected by the Nominating Committee in accordance with Chapter X, Section 4 of the By-Laws and also additional nominations may be made from the floor of the House of Delegates.

SPEAKER OF THE HOUSE: That is presented to you for discussion at the Reference Committee, to be brought back on Tuesday for final action.

That is referred to Reference Committee I.

PRESIDENT WELTON: The Executive Council passed a motion that the proposed "Statement of Understanding" with regard to the Medical Society and the Blue Shield be presented to the House of Delegates with the recommendation that it be referred to a Reference Committee.

I believe that you have a copy of this at your place.

SPEAKER OF THE HOUSE: That goes to Reference Committee I.

Dr. Naumoff!

DR. NAUMOFF: Mr. Speaker, as Chairman of Reference Committee I, am I to understand we are to concern ourselves only with the change in the By-Laws and Statement of Understanding and not the whole report of the ad hoc committee?

SPEAKER OF THE HOUSE: The whole report!

DR. NAUMOFF: Sorry I asked! [Laughter]

SPEAKER OF THE HOUSE: I don't blame you!

PRESIDENT WELTON: The next item concerns the Headquarters Facility building.

The Council passed a motion that the plans to add additional foundation, structural engineering, the purpose of which is to provide for two additional stories at a later date.

This was approved by the Council and recommended to the House of Delegates.

SPEAKER OF THE HOUSE: That goes to Reference Committee II for discussion and action on Tuesday.

PRESIDENT WELTON: The next item is in reference to a Committee on Medical Education which I appointed and, as I explained, was an ad hoc committee and in order to make it a permanent committee, a change in the By-Laws will be necessary.

I also indicated to you that I thought this was of extreme importance to the Society.

This will require calling on Dr. Shaffner.

SPEAKER OF THE HOUSE: Dr. Shaffner will now read the proposed change in the By-Laws.

DR. SHAFFNER: You will need to look at two pages this time.

Take out Resolution "J" and item three in the report of the Committee on Constitution and By-Laws.

Our committee proposed that the By-Laws, as recommended in Resolution "J", be accepted as worded except for the following changes:

On page 1, line 49, at the bottom of the page delete the words, "... the distribution and," and the words "of, and in" be inserted in lieu thereof.

I'm going to read the corrected or amended proposal as soon as I read these specific changes.

On page 2, line 3, the word "should" be changed to "shall."

On page 2, line 9, the word "initially" should be inserted between the words "made" and "on."

And, the sentence beginning on page 2, line 13, be modified to read "when a vacancy occurs, a successor shall be appointed for the remainder of that term."

This would make the amendment read with these suggested word changes as follows:

Amend Chapter X by adding another section:

Section 22:

A Committee on Medical Education consisting of

at least ten members shall be the study, coordinating, liaison, and implementing committee with respect to all activities of the Society in the recruitment of and in the improvement in undergraduate, postgraduate and continuing education of physicians and allied health personnel within the State. To this end, the President shall appoint members-at-large and members representing the medical schools in North Carolina the medical specialty organizations, including the Academy of General Practice of North Carolina and such other organizations and agencies in the field of medical education as deemed appropriate.

Appointments shall be made initially on a staggered basis: one-third for two years; one-third for four years; and the remainder for five years. At the expiration of any one term a successor shall be appointed for a term of five years. No one shall serve for more than one five year term. When a vacancy occurs, a successor shall be appointed for the remainder of that term.

The Committee shall report its activities and its recommendations to the House of Delegates and, in the interim, to the Executive Council and upon approval shall endeavor to implement its recommendations.

For your clarification, the word "distribution," our Committee suggested that word be left out because we felt that distribution of physicians did not belong in a Committee on Medical Education of Physicians.

SPEAKER OF THE HOUSE: Your Speaker is going to rule that those changes in the By-Laws have been duly presented to you by the By-Laws Committee for your consideration and discussion in the Reference Committee and to be brought back for action on Tuesday.

I'm also going to rule that Resolution "J" has been presented to you and is now your property without going any further with it.

That is referred to Reference Committee II.

We're going to wear those boys out!

PRESIDENT WELTON: I call your attention now to the report of the Council on Planning, a copy of

which is at your place.

This is sometimes known as Blue Ribbon No. 2 Committee, but officially the Council on Planning and is made up entirely of past presidents and charged with long-range planning, interpretation of the proper functions of the Society, present and future and so on.

This is brought to you as information only.

The Council has requested that I read to you certain portions of this report.

First is on page four, I:

Medicine should explore with the Governors and the Councils of State the probability of encouraging those who do appoint M.D.'s to state level boards, commissions and councils, the wisdom of consultation with the State Medical Society prior to their appointment of these individuals; this, because this Society and only this Society has the knowledge of its membership, their talents and their interests.

This is a current recommendation to the House of Delegates by way of the Executive Council.

The next item concerns Headquarters Facility, page six, we have already discussed that.

Turn now please to page seven, item one:

We feel that this Medical Society of the State of North Carolina should be more involved and view without prejudice but with an excited interest the development of additional types and numbers of paramedical personnel and that this Society should engage in the active achievement of standards, curriculae development and curriculum delivery and, finally, in the specifics of the finer points of the training of new forms of paramedical people. We do not speak here of the existing paramedics such as nurses, technicians, laboratory technologist and the categories that are known to us now, but we speak of the so-called new breeds.

2. The Society shall effectively engage in formulations which involve medical practice patterns to the end that optimum delivery of care is available for as many people as is possible.

3. We think that medicine has the responsibility, shall and should assume the full guiding responsibility for the total delivery of illness care and health care services. This we have called the apex of the pyramid concept, and we should plan for such.

On page eight:

5. Plan with reference to a re-alignment of the committee and commission structure within the Society to the end that the structure is more functional and that it definitely channels policy and procedure through specific avenues to the proper decision points where policy is made, and that policy decisions not involving Constitution and By-Law statements be recorded in a separate document and reviewed and brought up-to-date annually by an appropriate body.

6. This Society should begin now with planning that will require evidence of continuing education on the part of every and all physicians in this State. This could be done either on the basis of a requirement for membership in the State or component societies, or as a requirement of periodic

re-registration or licensure. We must look forward to the day when the Medical Society of the State of North Carolina demands evidence of freshening and continuing postgraduate education for all doctors of medicine in this State, as well as for certain echelons of the paramedics.

I may have been in error, Mr. Speaker, with reference to page six on the Headquarters Facility. This is item "D" and is a recommendation by this Council that the necessity for built-in provisions in the original plans for a substructure which will permit expansion of the facility when such becomes necessary, or plans whereby additions could be made.

This information should be available to the Reference Committee that considers this item, but your attention is called to the complete report here which, like many of these others, is the result of considerable time and effort.

This is brought to you only as information.

The next item is with reference to Committee Blue Ribbon No. 1.

This committee is charged with an overall evaluation of the operations of the Society and, as I said earlier, has already reported on recommended changes in the annual session, publications and several other matters.

At the present time, the evaluation of the headquarters operation is being done and will soon be completed by an outside management firm and will be reported to the Chairman in early June to his committee and then brought to the Council following that.

This is for your information.

Next item concerns the change of carrier of the Part "B" of Medicare, effective July 1, 1969.

Prudential Insurance Company of America will on that date take over current operations which have been performed since July 1, 1966 by the Pilot Life Insurance Company.

At our request, several officials are here in order that you may look at them, and they may say a few words to you. We appreciate their coming very much.

I would like for them to come forward now and I call first on Mr. Douglas Richard, Southeastern Regional Administrator, Bureau of Health Insurance, Social Security Administration.

Mr. Richard!

MR. DOUGLAS RICHARD [Bureau of Health Insurance, Social Security Administration, Atlanta, Georgia.]:

Thank you, Mr. President.

The young man from the Student American Medical Association spoke of health alternatives. In view of the lateness of the hour, I think I'll offer the "healthy alternative" of resisting the normal tendency of the bureaucrat to make a speech and simply say that the transition from the Pilot people to the Prudential people is proceeding quite favorably, quite well. We believe that there will be little disturbance to you people or to the beneficiaries of the social security program in the State of North Carolina.

I would like to say here that we deeply appreciate

what Pilot has done in the last years and look forward to having the same kind of fine service from the Prudential people.

Thank you, very much.

[Applause]

PRESIDENT WELTON: Thank you, Mr. Richard.

It has been our experience that Mr. Richard is an unusually fine public servant. He's reasonable and all of our contacts and dealings, discussions with him have been very satisfactory and I believe we are fortunate that we have come under his jurisdiction in the administration of Part "B" of Medicare.

Now I want to introduce to you two representatives of the Prudential Insurance Company of America, who have already been at work in Greensboro with the Pilot people in order to make this a painless and a completely satisfactory transition.

Mr. Everett Park, Director of Medicare Operations of Prudential Insurance Company of America.

Is Mr. Park here?

MR. EVERETT PARK [Prudential Insurance Company of America]: Thank you, Dr. Welton.

We will be starting as of July 1st and actually, of course, I think you'll see the same situation prevailing you have been experiencing the last three years because the entire Pilot staff, which has been processing Medicare claims for the last three years, will as of that date become Prudential employees.

The operation will report to me in Millville where we have our Medicare operations for Part "B" and Part "A" in New Jersey, but the Prudential doesn't believe in absentee management, so there will be a man here who will not only have the responsibility, but he will also have the authority and he will be living in your State.

We look forward to this operation. We know most of the Pilot people very well because in Medicare, as you would expect, there were very many meetings. We have worked with them on many different subjects, so that it was sort of a renewal of acquaintance coming down here to North Carolina over the past four weeks getting this thing structured so that there can be a very smooth transition.

Thank you, very much.

[Applause]

PRESIDENT WELTON: Thank you, Mr. Park.

I want also to tell you that we have had several conferences with these gentlemen, in conjunction with representatives of Pilot Life and they certainly have exhibited an extremely conscientious attitude and want to do their very best to keep the operation of this as satisfactory as it has been to us.

They come very highly recommended from the Medical Society of New Jersey.

I would like to present next Mr. Don Peck who will be their man in charge of Medicare operations in North Carolina and will live in Greensboro.

Mr. Peck!

MR. DONALD PECK [Prudential Insurance Company of America]: Thank you, Mr. President.

Members of the House of Delegates:

Since I am the only one of the awful threesome

here who's going to be living in North Carolina, I feel I should take this opportunity to say just a few more words perhaps than they did.

They have already assured you that this transition from Pilot to Prudential is going to be as smooth as possible. I certainly want to do everything I can to assure that situation.

I would also like to say over the last day or so that I've been here, I've had the opportunity of talking with a number of you gentlemen individually and I want to say that I'm very gratified for the cordial reception that I've received. I have noticed that there has been some concern with some members and perhaps that's too strong a word—maybe some question just what this change-over from Pilot to Prudential will really mean; what effect will it have on the relationship that exists between the beneficiaries, the physician and the Medicare carrier.

I can only say in the Prudential, as it is in most insurance companies, our business is service and in Medicare, our business is paying claims.

We are not in the business and nor are we in the habit of making changes for changes sake alone.

Actually, as time goes on, of course, no two companies operate exactly the same. Our administrative procedures, our techniques, our methods, our clerical operation and so forth may gradually evolve towards the Prudential way, but any such changes will be made carefully, well thought out and well planned in advance. Hopefully, logical and sensible decisions will be made.

In short, let me just also assure you that our objectives for Medicare in North Carolina are the same that we have for our Medicare operation in New Jersey and I'm sure that each of you can subscribe to them; and that is to do the best job we know how for the beneficiaries, for the physicians and for the general public.

Thank you. [Applause]

PRESIDENT WELTON: Thank you, Mr. Peck.

We welcome you and your family to North Carolina.

One thing which I believe you may all feel easier about is that they're going to retain most of the present employees, so that your girls will be talking to the same girls at the other end when any matter about claims arises.

We turn now to the report of the Mental Health Committee, which was approved by the Council. This included a policy statement on "The Role of the Physician in Suicide Prevention" a copy of which is at your place.

There are six recommendations which I have been asked to read. You will find these on page two.

1. Physicians have a major responsibility in recognizing and evaluating suicide potential, exercising caution in prescribing drugs and alerting relatives and other responsible individuals to the possible danger of suicide in a patient.

2. Appropriate follow-up of patients identified as suicidal should be developed in the community. Suicide attempters are known to repeat these acts.

3. Physicians should cooperate with police or medical examiners in equivocal cases so that correct conclusions can be reached. Many suicides are classified as accidents because the facts are not known to the police. Police should be encouraged to consult freely with physicians in problem cases.

4. Community services for suicide prevention should be established where possible as part of the comprehensive mental health plan for the entire community. Ideally, these services would operate within on-going 24-hour emergency services in a hospital or community mental health center.

5. Suicide prevention is a community responsibility and physicians must provide the leadership in development of community education programs in suicide prevention.

6. Key people, including public health nurses, ministers, social service agencies, teachers, law enforcement bodies, etcetera, must also be involved. Community education programs should be developed as part of the total mental health education program in the community.

Prepared by the Mental Health Committee ad hoc Committee on Suicide Prevention, for reference to a Reference Committee.

SPEAKER OF THE HOUSE: That is referred to Reference Committee I.

PRESIDENT WELTON: We turn now to the report of the Committee on Nursing, a copy of which I believe you have.

This report was approved by the Council, including endorsement of the AMA Resolution No. 26 and is submitted to the House of Delegates for approval.

Resolution No. 26 of the AMA reads as follows: [Whereupon President Welton then read only the Resolved portion of the resolution, but the entire resolution is included for a more complete record.]

WHEREAS, the acute shortage of trained nursing personnel throughout the country has posed a serious problem in patient care in our hospitals; and

WHEREAS, many nursing schools have been closed in recent years, because hospitals can no longer afford the heavy costs of nursing education thus compounding the paucity of trained nurses; and

WHEREAS, the licensed practical nurse, the two-year associate degree nurse trained in our community colleges, the three-year diploma nurse trained in our hospital nursing schools, and the four-year baccalaureate university degree nurse are all separate entities and do not complement each other academically; and

WHEREAS, recent legislation (H. R. 157-57, the Manpower Training Act of 1968) has been passed by Congress, this act providing a subsidy to financially distressed nursing schools and is obviously intended to alleviate the stress on hospital finances and provide more trained nurses; therefore, be it

RESOLVED, that the American Medical Association urge increased subsidies to hospital nursing

schools; and be it further

RESOLVED, that the state and county medical societies be encouraged to study the problems relating to nursing education and to seek at the local level all available sources of financial support for hospital nursing schools; and, be it further

RESOLVED, that the American Medical Association take appropriate action in consultation with professional nursing associations and the American Hospital Association to encourage increasing enrollment in diploma schools.

Mr. Speaker, I believe this is submitted for referral to a Reference Committee.

SPEAKER OF THE HOUSE: I might explain that the only copy of Resolution No. 26 from the AMA in existence in North Carolina, to my knowledge, Dr. Lymberis has it and you don't have a copy of it, but we'll try to get copies of it made for the Reference Committee.

And, that will be referred to Reference Committee I.

A copy of the rest of the committee's report is in your green folder that was sent to you by mail.

PRESIDENT WELTON: The next item which I wish to report to you, on behalf of the Council, is the election of nineteen persons as Board of Directors of MEDPAC.

This is for information only, not for Reference Committee, not for action.

These people serve a one year term.

The following nineteen persons were elected to serve during the year 1969-1970:

John S. Rhodes, M.D.;
Kenneth Cosgrove, M.D.;
George Paschal, Jr., M.D.;
Ledyard DeCamp, M.D.;
Jack Hughes, M.D.;
Paul Deaton, M.D.;
Frank W. Jones, M.D.;
Donald B. Koonce, M.D.;
Hubert M. Poteat, Jr., M.D.;
Thomas Thurston, M.D.;
Edward Bond, M.D.;
Charles D. Blanton, Jr. (Pharmacist);
William Hollister, M.D.;
John Weyher, Jr., M.D.;

Mrs. Torben Seear, who has served as Legislative Chairman of the Women's Auxiliary;

Mrs. Betty McCain, whom you had the pleasure of hearing earlier in this program, the outgoing President of the Women's Auxiliary;

W. J. Smith, who is Executive Secretary of the North Carolina Pharmaceutical Association;

Robert Moffat, M.D.;

John Cheek, Jr., M.D.

That is just for information, Mr. Speaker.

I think we're ready now for Resolutions.

SPEAKER OF THE HOUSE: That is for your information. It is a duty, obligation and prerogative of the Executive Council to elect MEDPAC Board of Directors according to the Constitution of MEDPAC, so that is for your information.

Now, we'll go to resolutions. We have about eighteen of them. We would like to proceed as orderly and as properly as possible.

I will call on the Committees that have made recommendations or resolutions.

Anyone who has a resolution in this group, if they will go to the microphone and be available as I call on them, then we can move along as rapidly as we can.

First of all, we will take the resolutions which we have received to date, by letter and lastly, those resolutions which you received in your folder which are listed by number, and anybody presenting a resolution, please present the resolution only and not the whereases and make it brief!

And, of course, there will be assignment to reference committee but no discussion.

Resolution "A" from the Committee on Community Health. Is there anybody from that committee to present that resolution?

Yes, sir!

Now, those of you with resolutions, please go to a microphone and stand there and wait until we get to you, will you, so we can save as much time as possible? We're running late.

Microphone number three! Go ahead!

DR. EDWARD L. BOYETTE (Duplin County): I have the resolutions as we presented them but I don't know which number you're calling for right now, Dr. Koonce.

SPEAKER OF THE HOUSE: Number "A", Mental and Physical Examinations for Children entering elementary school.

Identify yourself, please, Dr. Boyette!

DR. BOYETTE: Boyette from Chinquapin and Chairman of the Committee.

Resolution "A":

Subject: Mental and Physical Examinations for Children entering Elementary School

The Medical Society of the State of North Carolina go on record as supporting and endorsing comprehensive physical and mental examinations for all students about to enter elementary school in order that physical and mental defects are discovered and that those individuals be referred for competent professional help and appropriate school placement.

SPEAKER OF THE HOUSE: That goes to Reference Committee I.

Resolution "B" from the same committee, that's on "Training of Family Physician."

DR. BOYETTE: This is a follow-up resolution to the one that the State went on record for last year regarding the recommendation that the Board of Family Practice be established and this states:

[Whereupon Dr. Boyette read only the resolved portion of the resolution, but the entire resolution is included for a more complete record.]

Resolution "B":

Subject: Training of Family Physician.

WHEREAS, the House of Delegates of the Medical Society of the State of North Carolina in a previous session has gone on record as favoring the establish-

ment of an American Board of Family Practice by the American Medical Association; and

WHEREAS, it is felt that the establishment of such a Board will help lead to the increase in the number of family physicians; and

WHEREAS, there still exists the need for such physicians; and

WHEREAS, resident programs for the training of such physicians will be created in hospitals capable of teaching such physicians; and be it,

RESOLVED, that the Medical Society of the State of North Carolina go on record as urging hospital facilities in North Carolina which are capable of meeting the requirements for residency programs to train family physicians, establish such residency programs as soon as possible, and work toward the approval of such programs by the AMA Council on Medical Education as soon as possible.

SPEAKER OF THE HOUSE: Reference Committee I.

Resolution "C" Training of Nurses.

DR. BOYETTE: Resolution "C":

Subject: Training of Nurses.

WHEREAS, in the community hospitals and the rural hospitals in North Carolina, the majority of the nursing personnel are obtained from diploma schools of nursing; and

WHEREAS, the collegiate programs for training nurses are not now meeting the need for nurses, particularly in community hospitals; and

WHEREAS, with the increase in demand for medical services the demands for registered nurses will increase; and, be it

RESOLVED, that the Medical Society of the State of North Carolina go on record as urging:

- 1) That all steps possible be taken to reverse the trend of the closing of diploma schools of nursing.
- 2) That the associate degree training programs be upgraded to the point that a high percentage of those taking the nursing examination from these programs will be qualified to do nursing.
- 3) That also the output of BS degree nurses be increased.

SPEAKER OF THE HOUSE: That goes to Reference Committee I.

Resolution "D" from the same committee.

DR. BOYETTE: This is a follow-up to a previous resolution which the House of Delegates passed last year and it's related to something that the Legislature is looking at right now.

Resolution "D":

Subject: Traffic Safety.

WHEREAS, deaths and injuries and property damage due to traffic accidents continue to be a major health problem in North Carolina; and

WHEREAS, these deaths are useless deaths and preventable; and

WHEREAS, the Medical Society has previously gone on record as urging that steps be taken by those responsible to curb these accidents; and

WHEREAS, alcohol is one of the leading causes of accidents in the State of North Carolina; and

WHEREAS, the curbing of the use of alcohol by motor vehicle operators is essential if the death and injury rate is to decline, be it,

RESOLVED, that the Medical Society of the State of North Carolina go on record as urging the State Legislature to adopt legislation which will make it illegal for one to operate a motor vehicle whose blood alcohol level is 0.05 per cent; and, further, be it,

RESOLVED, that the Medical Society of the State of North Carolina go on record as urging the State Legislature to pass an implied consent law with regard to testing for blood alcohol levels; and, further, be it,

RESOLVED, that a copy of this resolution be sent to the Governor of the State of North Carolina, the Speaker of the House of Representatives, the Lieutenant Governor, and the Commissioner of Motor Vehicles.

SPEAKER OF THE HOUSE: Reference Committee II.

Resolution "E" from the same committee, "Safety Frame and Roll Bar for Tractors."

DR. BOYETTE: This is related to the fact that we still have fifty to sixty people killed in North Carolina due to tractor turn-overs. The AMA has a resolution similar to this.

Resolution "E":

Subject: Safety Frame and Roll Bar for Tractors.

WHEREAS, approximately fifty people are killed in the State of North Carolina from tractor turn-over accidents every year; and

WHEREAS, most of these deaths can be prevented by proper safety frames on these tractors; and

WHEREAS, such frames are available and can be installed; and

WHEREAS, it is the duty of the Medical Society of the State of North Carolina to call attention to those concerned with reference to health hazards, be it,

RESOLVED, that the Medical Society of the State of North Carolina go on record as favoring the study and adoption, by the proper authorities, of framing on tractors which will prevent these deaths in rural areas.

SPEAKER OF THE HOUSE: Reference Committee II.

Resolution "F" from the same committee.

DR. BOYETTE: This, of course, relates to our streams primarily and to air pollution which is increasing to the point where you can't live in some of our cities and perhaps our rural areas soon.

Resolution "F":

Subject: Environmental Pollution.

WHEREAS, the pollution of the air which we breathe continues to be an increasing problem and an increasing health hazard; and

WHEREAS, the pollution of water, likewise, has been recognized to a degree by the State Government, be it,

RESOLVED, that the Medical Society of the State of North Carolina go on record as urging that steps be taken as rapidly as possible to clear our air of pollution and our streams of pollution and to

prevent the pollution of our environment in all other respects. Further, be it,

RESOLVED, that the Medical Society urge cooperation by the county medical societies with local authorities with regard to environment pollution control, our State Government, with the governments of other states and with the federal government, towards the end that our air will be cleared and our waters pure again; and, further be it,

RESOLVED, that the Air and Water Resource Board be asked to maintain strict enforcement of present water and air pollution control standards and to adopt new standards of air quality as soon as they become available.

SPEAKER OF THE HOUSE: That goes to Reference Committee II.

Resolution "G" from the same committee, "Physical Examinations and Retirement Age of Government Officials."

DR. BOYETTE: This last one is probably a "touchy" resolution, which goes back to the time when our Constitution was formed, there was an age limit for those on the lower levels who served in various forms of government.

Resolution "G":

Subject: Physical Examinations and Retirement Age of Government Officials.

WHEREAS, community health and the health of the nation to an increasing degree is being influenced by activity of the government; and

WHEREAS, the activity of the government is dependent to a degree on the physical and mental vigor of the elected and appointed officials of the government; and

WHEREAS, the government has established the requirement for physical examinations and a retirement age for military services, civil service employees and for those under social security; and

WHEREAS, with increasing longevity an increasing incidence of degenerative diseases appear; and

WHEREAS, the electorate with facts available are not always able to determine the mental and physical qualifications of a potential government official; and

WHEREAS, the election or appointment of an individual impaired by mental or physical defect could lead to a disaster for this nation; and,

WHEREAS, the requirement for physical examinations and the establishment of retirement ages is nothing new to government; and,

WHEREAS, it is felt that those who would guide the destinies of this great nation would be physically and mentally able to do so, be it,

RESOLVED, that the Medical Society of the State of North Carolina, carrying out part of its responsibility to the people, go on record as favoring that all officials seeking elective office or appointive office be required to give evidence as to their physical and mental fitness to serve in the government; and also go on record as recommending the establishment of retirement ages not

different from those of civil service employees and that retirement ages be mandatory at this age. Be it further

RESOLVED, that this Society go on record as favoring that these requirements be incorporated in the Constitution of the United States similar to the age requirements now stated therein, as relates to federal officials; be it, further

RESOLVED, that the Medical Society of the State of North Carolina request, through proper channels, that the Legislature of the State of North Carolina give consideration to instigating action as outlined in the Constitution towards obtaining such Constitutional change, by Constitutional amendment, and take such action that would be applicable to local and state officials; be it, further

RESOLVED, that copies of this resolution be sent to each state medical society and presented as a resolution to the American Medical Association.

SPEAKER OF THE HOUSE: That is referred to Reference Committee II also.

Now, according to our Reference Committee procedure, resolutions sent in and allowed to come in—after two weeks—by the Executive Council come in by approval of the Executive Council and although they are not for discussion the Executive Council, for your information, has the right and should give their opinion on such a resolution when they have it on the floor and Dr. Welton should give that action of the Executive Council.

PRESIDENT WELTON: These resolutions were all considered and studied by the Council yesterday. All were approved except the last one you heard read, Resolution "G" which was unanimously not approved.

SPEAKER OF THE HOUSE: That is for your information.

Now, Resolution "H" from the Committee on Professional Insurance. Is there any member of that committee here?

It's on a proposal of Daily In-Hospital Money Payment Plan by Kemper Insurance Group. This is a two page resolution.

Do you want me to read this or do you want to accept this as information?

DR. ROMM: I move we accept it as information.

SPEAKER OF THE HOUSE: Accept it! It has already been sent to you by mail, or in your folder. Therefore, it will be referred to Reference Committee I.

[Resolution "H" was not read in the House but is included for the record.]

Resolution "H":

Subject: Proposal of Daily In-Hospital Money Payment Plan by Kemper Insurance Group.

Be it,

RESOLVED, that the Medical Society of the State of North Carolina accept the proposed "Daily In-Hospital Money Payment Plan" by Kemper Insurance Group through Mr. Ralph Golden and his Agency with all the stipulations proposed in Mr.

James T. Barnes' letter and Mr. Golden's response; and that this information be presented to the Executive Council in May for endorsement.

1. Q. Is the \$25 dependent child premium extendable to each of the three hospital pay rate brackets?

A. The \$25 dependent child premium is not extendable to each of the three hospital pay rate brackets. The only dependent child coverage available is the \$10 per day benefit.

2. Q. Does the premium rate at each renewal increase as one's age increases and as per the bracket rates expressed in the proposal?

A. The premium rates do increase as the insured's age bracket changes. This is true for practically all group coverage. If this were a constant premium, the younger members would be sharing the cost of the older insureds where the loss ratio is much higher.

3. Q. It appears the \$20 and \$30 payment is not available to one past the age of 60 years?

A. Up to \$30 per day is available to members to age 64. For age 65 and over, \$10 per day is the maximum.

4. Q. What underwriting rate will be in effect on applicants' premium if 500 applications are not obtained in the 90-day open period?

A. We anticipate keeping the same rates that are quoted, if we do not get 500 applications during the first 90-days; but only those applicants who are insurable will be accepted. If 500 or more apply, all applicants will be issued the "Daily In-Hospital Insurance."

5. Q. Is it possible the "charter enrollment period" of 90 days could be enlarged?

A. I have been told that the charter enrollment period may be extended to 120 days if necessary.

6. Q. If an applicant is accepted and then experiences an enforced military service (during which he is recognized as an "Active Exempt (dues) Member" is excluded from coverage for the interim; can this one re-enter the plan of coverage without underwriting or disturbing the original plan premium rate applicable to this age?

A. An insured, called into the military service, may resume his coverage by notifying Kemper Insurance Company within 90 days of his return to civilian status. His premium will be the rate that is in force at the time for his age group.

7. Q. We note the proposal uses "active member" in the first eligibility paragraph. Would not this tend to exclude insurable active practicing "life members"; "affiliate members"; and "intern-resident members;" whereas, some life members are under 60 years and others 60 years to "above 65"; whereas, affiliates tend to be younger men in hardship case groups; and, whereas, intern-residents are usually quite young? Too, we carry some exempt "active

members" during periods of inactive practice due to disability. One would suppose some of the latter should have underwritten access.

A. It has never been, nor would it be, the intent of the insurance company to direct what the Society's membership criterion is. All physicians considered by the Society as being members will be eligible for this program.

8. Q. The proposal conditions the acceptance of same not later than March 16, 1969, obviously not possible as committee review and Society endorsement cannot be vitally accomplished earlier than May 18, 1969.

A. The company has extended the date for acceptance of this proposal to September 16, 1969.

SPEAKER OF THE HOUSE: Resolution "I" from the Committee on Disaster Medical Care. Is there any member of that committee here? [No response] This is a short one, I can read.

Resolution "I":

Subject: Continuing Studies of Disasters.

WHEREAS, disasters producing multiple numbers of casualties occur with alarming frequency; and

WHEREAS, such events provide a suitable setting and sympathetic laboratory for the responsible and scientific study of the problems in disaster medicine; and

WHEREAS, the Division of Emergency Health Service of the U. S. Public Health Service in cooperation with the Committee on Disaster Medical Care, Council on National Security of the American Medical Association, the Committee on Trauma of the American College of Surgeons and the American Hospital Association has instituted a series of disaster studies; and

WHEREAS, the effective acquisition of data is dependent upon the cooperation of physicians; therefore, be it,

RESOLVED, that the American Medical Association inform the profession of the disaster studies, urging their cooperation in the program; and be it further

RESOLVED, that the Association provide the profession with guidelines for the acquisition of data on medical care rendered under disaster conditions, as well as the organization of the disaster medical force.

That will go to Reference Committee II.

Resolution "J" has already been presented and referred.

Now, we come to the resolutions that were sent in before the two weeks. Immediately as they were sent in they became the property of the House and although the Executive Council could discuss them as they saw fit, they had no right to take any action.

Resolution 1 by the Chatham County Medical Society. Is there anybody from the Chatham County Medical Society to present this? [No response]

As I said at our last annual meeting, if a society

or an individual went to the trouble to present a resolution, I think it should be presented to the State Medical Society, the House of Delegates, but I think they should also be interested enough to be here to see that somebody representing them is here to present it.

Last time I took the prerogative, because it was new and I still think it's a little too new to refuse this resolution because nobody is here.

I am going to take the prerogative of reading it as presented.

Resolution 1:

Subject: Request for Insurance Carriers to be Instructed to Include on all Checks, etcetera, full name of insured.

Be it,

RESOLVED, that the North Carolina Medical Society Blue Cross and Blue Shield Insurance Committee instruct the insurance carrier, Blue Cross and Blue Shield, to include on all checks, vouchers and correspondence concerning same enough of the first name and middle initial of the insured to make it possible for easy identification in the files of the provider of medical care. As it is now, only the initial of the first name and the last name are on the various checks and vouchers which makes for confusion when a doctor has several J. Does in the files.

That goes to Reference Committee I.

Resolution No. 2 from Rowan-Davie. Is there anybody to present that? Yes, sir!

DR. L. HARVEY ROBERTSON [Rowan County]:
L. H. Robertson from Salisbury.

This is in regard to the present fee schedule of the Industrial Commission in certain specialized fields. The group from Rowan-Davie felt there was discrimination in the compensation and, therefore, made this resolution.

Resolution No. 2:

Subject: Present Fee Schedule of the Industrial Commission in Certain Specialized Fields of Medicine.

WHEREAS, it is well known that the present fee schedule of the Industrial Commission in certain specialized fields of medicine is far below the usual and customary fee for similar services provided private patients in North Carolina and the paperwork required for payment is in excess of that required by other third parties. We feel that these items in effect are evidence that the medical profession in North Carolina is forced by law to partially subsidize the proper medical care requirement of Industrial Commission cases in the State of North Carolina.

WHEREAS, it is our understanding there is no legal position for the establishment of a fee schedule and that this fee schedule has been established only by precedence and that any such schedule be disregarded. Therefore, be it,

RESOLVED, that the Rowan-Davie County Medical Society recommends that the delegate body

of the Medical Society of North Carolina take official cognizance of the fee schedule discrepancy between private and Industrial Commission and that it initiate through appropriate channels action that would require the Industrial Commission of the State of North Carolina to do away with any and all fee schedules and be required to pay usual and customary charges for care provided for those individuals falling under their statutory jurisdiction.

SPEAKER OF THE HOUSE: Thank you, sir.

That goes to Reference Committee I.

DR. CUTCHIN: Mr. Speaker!

SPEAKER OF THE HOUSE: Yes.

DR. CUTCHIN: Earlier you referred some matter Dr. Welton reported on the same subject. I wonder if it would be better to put this in the same committee as the proposed bills, as this one has to do with the same subject.

SPEAKER OF THE HOUSE: Well, we went through them last night and we arranged them the best way we can. They can communicate with each other.

DR. CUTCHIN: This goes to Reference Committee I?

SPEAKER OF THE HOUSE: That goes to number one, yes, sir.

DR. CUTCHIN: I was wondering as a total package where one has to deal with the proposed bills—

PRESIDENT WELTON: You mean, pertaining to the Workmen's Compensation Act.

DR. CUTCHIN: Right!

PRESIDENT WELTON: I did mention that in my remarks.

DR. CUTCHIN: Yes, but you referred that to Reference Committee II and since it's on the same subject, I wonder if you want to put them both in the same Reference Committee. They're interrelated.

PRESIDENT WELTON: I think it would be advisable to follow Dr. Cutchin's recommendation, Mr. Speaker.

SPEAKER OF THE HOUSE: Very well! At his suggestion, Resolution No. 2 then will go to Committee II rather than I.

Resolution No. 3 from the Edgecombe-Nash Medical Society.

DR. LLOYD W. BAILEY [Edgecombe County]:

Mr. Speaker!

SPEAKER OF THE HOUSE: Yes, sir!

DR. BAILEY: Lloyd Bailey from Rocky Mount!

I think all of you have already received information by mail about this resolution. I'll substitute the words Medical Society of North Carolina instead of Edgecombe-Nash because that's the way we hope it will be.

Resolution No. 3:

Subject: Sex Education Program in North Carolina Schools.

The Medical Society of the State of North Carolina endorsed the Family Life Education Program in our schools in 1965. It appears that this was innocently done with good intentions. It has now become quite clear that the "Family Life Education Program" encompasses many subjects which are

undesirable and which, if properly named, could not stand alone on their own merit. Furthermore, sex education, perversion, permissiveness and sexual experimentation are being encouraged under a SIECUS (Sex Information and Education Council for the U. S.) type of program which intentionally avoids morality as a guide for influencing the use of the newly acquired information. The Medical Society of the State of North Carolina has no control over curriculum presented under its sponsorship. It now appears that the prestige of our organization has been intentionally sought and used in a way which can only discredit us and bring shame and embarrassment to us. Therefore, be it,

RESOLVED, that the Medical Society of the State of North Carolina withdraw its sponsorship of the Family Life Education Program and instruct its delegates to the American Medical Association to introduce this resolution at the forthcoming national meeting and to work toward the passage of this resolution by our national organization; furthermore, be it,

RESOLVED, that the Medical Society of the State of North Carolina condemn the further use of SIECUS type sex education programs in our schools at any grade level; furthermore, the Medical Society of the State of North Carolina takes the position that there can be no proper sex education which is not heavily influenced and tempered by morality.

SPEAKER OF THE HOUSE: Those changes, of course, can be made by the Reference Committee, Dr. Bailey.

That goes to Reference Committee I.

Resolution No. 4 on Osteopaths.

DR. E. L. ROBERSON [Nash County]: Leon Roberson of Rocky Mount!

Resolution No. 4:

Subject: Osteopaths.

RESOLVED, that whereas, legislation admitting osteopaths to the unrestricted practice of medicine and surgery in North Carolina would bring about an unprecedented downgrading of the laws which have regulated the practice of medicine and surgery in our State and it is our belief that a change of this kind would be against the best interest of the people of North Carolina, we oppose such legislation and respectfully request our representatives in the General Assembly to do likewise if and when such legislation arises.

SPEAKER OF THE HOUSE: That goes to Reference Committee II.

Resolution No. 5 from Cumberland County Medical Society.

DR. CLYDE H. STEFFEE [Cumberland County]: Dr. Steffee from Fayetteville.

Resolution No. 5:

Subject: Resolution on Solicitation and Commercial Advertising of a Medical Specialty by Lay Corporations in AMA Publications.

WHEREAS, the AMA Board of Trustees voted

last fall to open all AMA publications to solicitation and commercial advertising of a medical specialty (pathology) by lay corporations, and

WHEREAS, physicians, by long tradition, are forbidden by activities characterized by self-laudation and solicitation, both of which are essential to commercial advertising, and

WHEREAS, this Trustee policy encourages the practice of medicine by lay corporations and promotes solicitation, in violation of all codes of medical ethics, and

WHEREAS, this Trustee policy, adopted without consulting the House of Delegates will set a precedent for regional, state and other medical journals, will spread to other fields of medicine and will lower standards of patient care; therefore, be it,

RESOLVED by the Cumberland County Medical Society in ordinary session assembled 8 April 1969 that this Society:

(1) reaffirms medicine's traditional opposition to the practice of medicine by lay corporations and to solicitation and to commercial advertising of the practice of medicine, and

(2) requests its North Carolina Medical Association delegates to oppose this new AMA Trustee policy vigorously at the North Carolina Society of Medicine convention in Pinehurst next May, and
(3) requests these delegates to call on the North Carolina delegation to AMA to reverse this Trustee policy at the July AMA Convention in New York City.

SPEAKER OF THE HOUSE: Thank you, sir.
That goes to Reference Committee II.

Resolution No. 6 from Wake County Medical Society.

DR. WILKERSON: Dr. Charles Wilkerson of Wake County Medical Society.

Resolution No. 6:

Subject: Implied Consent Law

WHEREAS, the United States Department of Transportation has reported in a recent study, entitled, "Alcohol and Highway Safety," that alcohol contributes to about 25,000 of the approximately 53,000 fatal highway injuries and at least 800,000 crashes in the United States annually; and

WHEREAS, more than 1,800 people were killed and 50,000 seriously injured and more than \$350 million worth of property destroyed by traffic collisions in North Carolina in 1968; and

WHEREAS, reports from the transportation department, "in every area of the nation in which the presence and concentrations of alcohol among individuals responsible for initiating crashes have been investigated systemically, alcohol has been found to be the largest single factor leading to fatal crashes; and

WHEREAS, scientific investigation has conclusively established that driving skills deteriorate rapidly as consumption of alcohol increases; and

WHEREAS, careful studies clearly show that

the higher the concentration of alcohol in the blood of a person driving an automobile, the greater the likelihood that: 1) that he will crash; 2) he will have initiated the crash; and 3) the crash will be severe; and

WHEREAS, the members of the Wake County Medical Society in their practices continually witness the human suffering and destruction resulting from serious automobile accidents caused by the excessive use of alcohol; and

WHEREAS, reports from several states and abroad indicate that educational programs and measures such as implied consent laws, requiring a motorist suspected of being under the influence of alcohol to submit to a chemical test or tests of his blood, breath, or urine for the purpose of determining the alcoholic content of his blood or forfeit his driving privilege, have led to reduced incidence of fatalities and serious injuries from street and highway crashes, now, therefore, be it,

RESOLVED, that the Wake County Medical Society recognizes the serious dangers inherent in the immoderate use of alcohol before driving and urges all motorists to refrain from consuming alcohol before driving; be it further

RESOLVED, that the Wake County Medical Society endorses and supports implied consent laws and other programs and policies designed to reduce the incidence of driving by persons while under the influence of alcohol; be it further

RESOLVED, that the Wake County Medical Society recommends to the Medical Society of the State of North Carolina that it also endorse and support implied consent legislation.

Now, we are referring specifically to implied consent legislation. This has already been passed in the House of Representatives of our State Legislature and goes before the Highway Safety Committee Tuesday morning for the Senate.

SPEAKER OF THE HOUSE: That goes to Reference Committee II.

Resolution No. 7 from the Pitt County Medical Society.

DR. ELLIOTT DIXON [Pitt County Medical Society]:

Dr. Dixon from Pitt County Medical Society.

Resolution No. 7:

Subject: Uniform type of Identification Card for Third Party Payment of Medical Care.

WHEREAS, many of the citizens of the State of North Carolina have medical insurance, and

WHEREAS, many more of the citizens of the State of North Carolina will be covered under third party payee, (i.e. Medicare and Medicaid) and,

WHEREAS, each doctor's office now spends a significant amount of time completing insurance forms and,

WHEREAS, this amount of time will increase in the future, be it,

RESOLVED, that the House of Delegates of the Medical Society of the State of North Carolina strongly urge the various third party payees (and especially North Carolina Blue Cross Blue Shield

and the payee for Medicare and Medicaid) that they formulate a payment system that would include the following:

- 1) A standard form as to size and format.
- 2) A specially designed form for the use of physicians.
- 3) A durable, wallet-sized card that the third party payee would distribute which could be used on a standard imprinter and which would supply all information needed by the third party payee to identify the individual contract.
- 4) The imprinter to automatically imprint the physician's name, address and any code or identification number common to all third party payees.

5) Automatically make the required number of duplicates required by the third party payee. And, be it further,

RESOLVED, that the Insurance Industry Committee, The Blue Shield Committee and the Advisory Committee to North Carolina Department of Public Welfare of the Medical Society of the State of North Carolina be instructed to use their influence and persuasion to see that this resolution is implemented at the earliest possible time.

SPEAKER OF THE HOUSE: That goes to Reference Committee I.

Resolution No. 8 from Pitt County Medical Society.

DR. DIXON: Resolution No. 8:

Subject: Bank Credit Cards

WHEREAS, banks are issuing many credit cards to their clients throughout the State of North Carolina; and

WHEREAS, many patients are requesting the use of these cards for payment of their medical bills; and,

WHEREAS, the Judicial Council of the American Medical Association has recommended certain principles for the guidance of physicians in regard to the acceptability of credit cards, be it,

RESOLVED, that the House of Delegates of the Medical Society of the State of North Carolina go on record that each county society or individual member decide whether or not they will accept bank credit cards in payment for medical services.

SPEAKER OF THE HOUSE: That goes to Reference Committee I.

Now, you have a motion to make?

PRESIDENT WELTON: Yes.

Mr. Speaker, I move you that the annual reports of the committees which have been published in the Compilation which you have all received, be approved by this House.

SPEAKER OF THE HOUSE: Is there a second to that motion?

[The motion was duly seconded from the floor.]

I think that motion is perfectly in order. I assumed that had been done when we accepted the reports of the committees.

Any discussion of this motion? [No response]

If not, those in favor let it be known by saying "aye"; opposed "no".

They are approved.

And, now, we will go into the business of election of a Nominating Committee.

Is Mr. Hilliard or someone here to put the standards of the different districts up?

We will ask you to gather under those standards for the sole purpose of selecting your member of the next Nominating Committee who go into office immediately after they are elected.

Now, I might read you for your information so there will be no confusion those men who are not eligible for re-election. If you remember, a man can succeed himself only once consecutively or serve for two years consecutively.

Those who are not eligible for re-election:

Dr. Wilkerson of Raleigh;

Dr. Patrick of Kinston;

Dr. Marshburn of Wilmington;

Dr. Maher of Goldsboro;

Dr. Houser of Cherryville.

The other five are eligible for election but don't necessarily have to be.

So, if you will gather and if you will have your spokesman bring to the rostrum as soon as possible the names, we will announce the election of the new Nominating Committee and then the only other business we have for this meeting is New Business and I hope there won't be much of that.

So, when you have selected your man, will you write the name on a slip and present it to me here, please?

[Whereupon there followed a twenty minute caucus of the districts.]

Will all the delegates please be reseated?

We don't have much business to attend to here but we have some.

While you're being seated, I'll go ahead with the announcement of nominations. Now, these are the nominations from your districts, which is supposed to be tantamount to election. We've never had an argument about it, but we will have to have a motion for their election.

For the First District: Dr. John A. Payne, III (renominated);

For the Second District: Dr. Charles Nicholson;

For the Third District: Dr. Olin Perritt;

For the Fourth District: Dr. T. T. Herring;

For the Fifth District: Dr. Bruce Blackmon (renominated);

For the Sixth District: Dr. Jack Hughes;

For the Seventh District: Dr. William Raby;

For the Eighth District: Dr. W. Joseph May (renominated);

For the Ninth District: Dr. Clyde R. Hedrick, (renominated);

For the Tenth District: Dr. Michael F. Keleher (renominated).

Do I hear a motion from the floor that these men be elected?

DR. JOHN GLASSON: So moved.

SPEAKER OF THE HOUSE: Is there a second to

the motion?

[The motion was duly seconded from the floor.]

Any discussion? [No response]

All those in favor, let it be known by saying "aye":
opposed "no."

[The motion carried unanimously.]

Now, will the newly elected committee on nominations assemble as soon as possible with the Secretary of the Society in the Green Room. It's on the left as you go in the dining room.

Assemble there with Dr. Styron and let him give you his formal instructions.

The next business on our agenda is New Business.
Is there any New Business?

Dr. Wilkerson!

DR. WILKERSON: Mr. Speaker, I'm Charles Wilkerson from Wake County.

The Nominating Committee asked me to ask you, as Speaker of the House, to refer to a Reference Committee the problem of tenure of office.

There are a number of offices in this Society that are limited by the length of time by which they may serve, but they may be re-elected any number of times thereafter. There are other offices that have no tenure of office whatsoever.

And, while we recognize the fact that a good man should be elected over and over again, it also prevents sometimes the development of new talent and challenges to younger members of this Society and we feel that this should be studied, if it meets with your approval and the approval of the House of Delegates that a Reference Committee study this problem about tenure of office.

SPEAKER OF THE HOUSE: I will accept that as a recommendation and not a resolution because a resolution has to have a two-thirds vote to be brought before the floor.

I will accept that as a recommendation and refer it to Reference Committee I for their consideration. I mean, they don't have enough to do! [Laughter] Next year, we're going to have to have four of these committees. And, for their consideration and to bring back a recommendation to us, not necessarily a definitive recommendation. I think probably this request of the Nominating Committee is a little bit hurried and we may be hurrying it too much and I'm not trying to influence a Reference Committee, but I think maybe they may make a recommendation that a study of this be made and further recommendations be brought back another time.

Will that meet what your committee wants because I don't think we're being fair to the Reference Committee? [Affirmative response]

Is there any further New Business? [No response]
Could I please have a motion to adjourn?

[The motion was severally made from the floor.]

So moved.

[The meeting adjourned at five-thirty-five o'clock.]

TUESDAY AFTERNOON SESSION

May 20, 1969

The Second Meeting of the House of Delegates of the Medical Society of the State of North Carolina convened at two-thirty-five o'clock, in the Cardinal Ballroom of The Carolina Hotel, Pinehurst, North Carolina, Dr. Donald B. Koonce, Speaker of the House, presiding.

SPEAKER OF THE HOUSE: Gentlemen, we have a long, hard afternoon ahead of us so I would appreciate it if all the delegates would come down and be seated; those who are not delegates who are seated down here, I would appreciate if they would go up and sit around the balcony.

I declare our recessed meeting is again in session.
I have a few remarks to make, with your permission.

From all of the discussions I've heard in the hall, there apparently is going to be a considerable amount of or more discussion from the floor. That is the reason this meeting is being held, for discussion of the actions and recommendations made by the Reference Committees.

However, the Reference Committees have thoroughly listened to discussion. If you were not there, of course, you can be heard here, but I'm going to take the liberty of the chair to limit discussion, so far as length of time is concerned.

You have had the opportunity to discuss it before a Reference Committee; you've had the chance to discuss it out in the hall and I think to get up and to give a long harange on a thing which has been adequately discussed would be wrong, so I'm going to take the liberty, as Chairman of this meeting, and instruct my Vice Speaker to do the same thing—five minutes should be a top limit for discussion.

Is that agreeable with everybody?

Somebody said two minutes, but I'm a right big so-and-so, you know but I'm not quite that big and I don't want Jim Davis to think I'm too bad! [Laughter]

He's got to put up with this thing for a long time, you know, when I get out of here!

The other thing is there seems to still be some misunderstanding in the Reference Committees about handling resolutions as to their disposition.

One recommendation from a Reference Committee is that "We recommend that no action be taken." That cannot be done. Some positive action must be taken with everything, every piece of business that has been referred.

Now, the other thing—and we'll take care of that when we come to it—on several occasions, the Reference Committees have recommended that this resolution not be adopted.

Well, they can recommend that it not be adopted, but in one place it says, "I so move." Now, remember, the resolution is the main motion. If the Reference Committee makes a substitute recommendation, that becomes the main motion.

If it is passed, the main motion is forgotten. If it

is defeated, we go back to the main or original resolution.

Is that understood? [No response]

If the Reference Committee does not want this resolution passed, they so recommend, but the vote will be taken on the resolution. If you're for the resolution, you vote "aye." If you're for the recommendation of the Reference Committee, you vote "no".

Is that understood? [No response]

Now, with your permission, I have two men who I think should be recognized and I'll simply ask them to stand up and be recognized.

The Commissioner of Motor Vehicles Department of North Carolina, Mr. Joe Garrett!

[Whereupon Mr. Joseph Garrett stood up to be recognized.] [Applause]

Glad to have you.

The Director of Driver's License Division, Mr. Ed Wade!

[Whereupon, Mr. Edward Wade stood up to be recognized] (Applause)

Glad to have you, too!

These men are interested in our action this afternoon on highway safety and I think very wisely so and I certainly think they would be justified to report back to the committees of the State Legislature tomorrow any action we take here because any action we take here is going to be public anyhow.

Are there any questions? [No response] Are there any other announcements that anybody would like to make? [No response]

If not, I'll call on our distinguished President-elect, to be tonight, for final ratification of the By-Laws, which will not include the two which specifically relate to resolutions which will be taken up at a later hour.

DR. SHAFFNER: This is the second reading of the proposed change in the By-Laws.

Item one of the report of the Committee on Constitution and By-Laws.

This has to do with clarifying organization of delegates to the AMA House of Delegates.

Amend Chapter IV, Sections 8 of the By-Laws by deleting from the first sentence the word "representatives" and inserting in lieu thereof the words, "society members as delegates and alternate delegates", and by inserting an additional sentence so that the section will then read:

It (North Carolina House of Delegates) shall elect Society members as delegates and alternate delegates to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body. Before each meeting of the AMA House of Delegates, the delegates shall designate one of their number as Chairman of the delegation and shall select from the list of alternates such number to vote as may be necessary so that the Society will be fully represented. The Executive Council shall have the authority to fill for the unexpired term any vacancy that may occur between elections.

Mr. Speaker, I move the adoption of this change to the By-Laws.

SPEAKER OF THE HOUSE: It has been properly moved and seconded by his committee that this be adopted.

Now, remember this is final action and if it is passed, it immediately goes into effect.

Any discussion? [No response]

If not, those in favor let it be known by saying "aye"; opposed "no". (The vote carried.)

So be it. It's the law of the land!

DR. SHAFFNER: This is item two, revised, on top of the green sheet, to set up a new Commission.

Amend Chapter X, Section 1 of the By-Laws by adding a new Commission entitled, "Developing Government Health Programs Commission".

Mr. Speaker, I move the adoption of this change in the By-Laws.

SPEAKER OF THE HOUSE: Any discussion? [No response]

If not, those in favor let it be known by saying "aye"; opposed "no".

The "ayes" have it.

DR. SHAFFNER: I'll come back with the other.

SPEAKER OF THE HOUSE: That's the end of his report.

I'd like to explain to you, for your information, that we're not negligent in declaring a quorum. On Sunday, we had—what was it, Jim? 151 or 158 members of the House of Delegates registered. According to our Constitution and By-Laws a quorum at this meeting necessitates a majority of those registered which would take, I think, around 79 and by a head count we have that, so we do have a quorum present and this meeting is perfectly legitimate.

I would like to request if you will that as many of you as possible stay until the end of the meeting because we've got an awful lot of important material coming up and I think we certainly should have a quorum to go through.

Now, we'll take up our Reference Committees' reports.

VICE SPEAKER OF THE HOUSE: Reference Committee I and I'll recognize Dr. Philip Naumoff, Chairman.

Everybody has a copy of the blue sheet of recommendations, haven't they? Copies are on the back table at the door as you come in.

Those who do not have a copy of reports of Reference I and II Committees please raise your hands; keep them up for a moment and we'll have them distributed.

DR. NAUMOFF: Mr. Vice Speaker, Reference Committee I met in accordance with the instruction yesterday. They met yesterday afternoon and last night and we were short-handed. One member of the committee, unfortunately, had to leave for emergency purposes and go back to his home. However, the other two members of the committee were here and we are pleased to give you the following report.

I think everybody has the blue sheet here now

This is not in the order in which the resolutions, or committee reports were referred to the Reference Committee, but the order in which we took them up.

First, with regard to the report of the Committee on Nursing.

**THE MEDICAL SOCIETY
of the**

STATE OF NORTH CAROLINA

MEMORANDUM

February 26, 1969

From: The Physicians Committee on Nursing

To: Executive Council

Subject: "Nurse Recognition Month" and
"Nurse of the Year" Awards.

I—GENERAL

a) It is proposed that the N. C. State Medical Society arrange for April each year to be designated by gubernatorial proclamation as "Nurse Recognition Month", b) that a state-wide program be promoted whereby local medical societies see to the selection and honoring of a "Nurse of the Year" from each of the "medical communities" of the state, and that from these awardees a nurse be chosen and honored as "North Carolina Nurse of the Year" at the annual convention of the State Medical Society.

II—RESPONSIBILITIES

A—The Physicians Committee on Nursing:

1. Secure action on this proposal by the State Medical Society.
2. Clear the proposal with N. C. State Nurses' Association and seek advice on the program.
3. Inform other committees and officials of the State Medical Society of their responsibilities in the program and coordinate these activities.
4. Prepare and distribute to local medical societies packets for conducting "Nurse of the Year" programs, such packets to include:
 - a. Guidelines for conducting "Nurse of the Year" contests.
 - b. Entry blanks.
 - c. Sample letters requesting nominations.
 - d. Sample news releases for local media.
 - e. List of suggested speakers for "Nurses Night" programs, who have specific interest in physician-nurse activities or nursing education.
5. Arrange for standardized awards (e.g. brooch and engraved bowl or platter) and most economical centralized purchasing of these items.
6. Collect credentials on local "Nurse of the Year" winners, and, in consultation with the President of the N. C. State Nurses' Association, select the "N. C. Nurse of the Year".
7. Arrange, in conjunction with the convention program committee, a banquet at the convention honoring all local "Nurse of the Year" winners, and awarding title of "N. C. Nurse of the Year".

B—Responsibilities of the Public Relations Committee:

1. Arrange for proclamation ceremony with the Governor's office.
2. Invite participants for proclamation ceremony:
 - a. N. C. State Medical Society:

President, Chairman Physicians Committee on Nursing, and Executive Secretary.
 - b. President, N. C. State Nurses' Association.
 - c. Last year's "N. C. Nurse of the Year".
3. Promulgate news releases on all state level activities of "Nurse Recognition Month" and "Nurse of the Year" awards.
4. Arrange news coverage of:
 - a. Proclamation ceremony.
 - b. "N. C. Nurse of the Year" Banquet at the state convention.
5. Prepare sample news releases for local media for inclusion in packet to local medical societies on conducting "Nurse of the Year" programs.

C—Responsibilities of Local Medical Societies:

1. Designate "medical communities" within the local medical society which should have "Nurse of the Year" awards.
(e.g.: Guilford County Medical Society should sponsor selection of a "Nurse of the Year" from both Greensboro and High Point.)
2. Designate the April medical society meeting to be "Nurses Night" with program and ceremonies as specified below.
3. Appoint a "Nurse Recognition Committee to handle "Nurse of the Year" campaign as detailed in guide-lines below and, with the following composition and responsibilities:
 - a. Awards Chairman
 - (1) Serve as chairman of Nurse Recognition Committee.
 - (2) Secure appropriate trophies from state headquarters.
 - (3) Secure appropriate gifts from local merchants for "Nurse of the Year" winners.
 - (4) Arrange and conduct awards ceremony for "Nurses Night".
 - (5) Forward credentials of "Nurse of the Year" recipients to the Physicians Committee on Nursing of the state society.
 - b. "Nurses Night" Chairman.
 - (1) Secure speaker for "Nurses Night" program.
 - (2) Invite guests and handle reservations for "Nurses Night" banquet, guests to include:
 - i. Members of the N. C. State Nurses' Association living or working in the "medical communities" encompassed by the local medical society.
 - ii. "Nurse of the Year" Judges Panel.
 - iii. Local government leaders

- (Mayors and county commission chairmen)
- iv. Newsmen as designated by public city chairmen.
- c. Nomination Chairmen (one from each "medical community").
- (1) Send out letters requesting nominations and entry blanks to:
 - i. District President, N. C. State Nurses' Association.
 - ii. Chief Hospital Nurses.
 - iii. Directors Nursing Schools.
 - iv. Hospital Administrators.
 - v. Director of all health agencies employing nurses.
 - vi. All members of local medical society.
 - (2) Set-up "Judges Panel" for each "medical community":
 - i. Nominating chairman to act as chairman of Judges Panel.
 - ii. District President, N. C. State Nurses Association or her local representative.
 - iii. Each Hospital Administrator or his non-nurse representative.
 - iv. Mayor or local Judge.
 - v. A local minister.
 - (3) Conduct selection campaign according to guide-lines contained below.
- d. Publicity Chairmen (one from each "medical community").
- (1) Distribute news releases and make TV appearances publicizing "Nurse of the Year" program.
 - (2) Arrange for news coverage for "Nurses Night" and "Nurse of the Year" award ceremonies.

III—GUIDE-LINES FOR SELECTING "NURSE OF THE YEAR".

A—Basic Criterion for Nomination:

All nominees accepted for consideration must be licensed Registered Nurses, regularly employed in full-time nursing activities.

B—Scoring:

1. General statement by person nominating candidate and attesting to her work, competence and personality as exemplifying the ideals of the nursing and her promotion of the nursing profession.
(To be graded by Judges Panel) 0-10 points
2. Work:

Extra work (employment) beyond regular job in meeting nursing needs of the community. (e.g.: hospital substitute, teaching, private duty, etc.).	
Regularly	3 points
Frequently	2 points
Occasionally	1 point

3. Professional Qualifications:

- a. Post-graduate education

Ph.D.	3 points
M.S.	2 points
B.S.	1 point
Special Certificate	1 point
 - b. Member American Nurses' Association

National, State or District Officer (past 5 years)	3 points each
National, State or District Committee (current)	1 point each
District Section Member	1 point
 - c. Member Nursing School Alumnae Group

Officer (Past 5 years)	1 point
Committee or Special Assignment	1 point each
 - d. Member Other Nursing Organizations

Continuing Education (Past 5 years)	1 point each
Accredited academic courses (not included in degree or certificate work)	2 points each
Seminars, workshops, etc.	1 point each
 - e. Continuing Education

Accredited academic courses (not included in degree or certificate work)	2 points each
Seminars, workshops, etc.	1 point each
4. Outside Civic Activities.
- a. Service Clubs or Voluntary Agency

Officer or Director (Past 5 years)	1 point each
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 - b. Governmental Board or Commission (Past 5 years)

Church activities as designated by candidate's minister	1 point each
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IV—SCHEDULE OF IMPLEMENTATION:

A—Agreement by the N. C. State Medical Society to undertake such a program.

May 1969, State Convention

B—Indoctrination of local medical society officers in the program.

C—Indoctrination of involved State Medical Society committees in the program.

Fall Committee Meetings, 1969

D—Distribute "Nurse of the Year" packets to local medical societies.

February 16, 1970

E—Conduct local "Nurse of the Year" contests.

March 1970

F—Local "Nurses Night" ceremonies.

April 1970

G—"N. C. Nurse of the Year" ceremonies.

May 1970, State Convention

Reference Committee I recommends that the report of the Physicians' Committee on Nursing be approved by the House of Delegates and that it be referred to the proper committee for implementation.

It further recommends the approval of Resolution 26

adopted by the American Medical Association House of Delegates in December, 1968.

VICE SPEAKER OF THE HOUSE: It has been moved and properly seconded by the other member of this committee that the report of the Physicians' Committee on Nursing be approved and that also Resolution 28 adopted by the AMA in December 1968 be approved.

Is there any discussion? [No response]

If not, all in favor please say "aye"; opposed "no".

The motion is carried.

DR. NAUMOFF: We next took up Resolution "C" introduced by the Committee on Community Health and we recommend that this resolution be adopted.

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

Executive Council

Resolution: C
(A-69)

Introduced by: Committee on Community Health
(Rural and Urban)

Subject: Training of Nurses

WHEREAS, in the community hospitals and the rural hospitals in North Carolina, the majority of the nursing personnel are obtained from diploma schools of nursing; and

WHEREAS, the collegiate programs for training nurses are not now meeting the need for nurses, particularly in community hospitals; and

WHEREAS, with the increase in demands for medical services the demands for registered nurses will increase; and

BE IT RESOLVED, that the Medical Society of the State of North Carolina go on record as urging:

- 1) THAT all steps possible be taken to reverse the trend of the closing of diploma schools of nursing
- 2) THAT the associate degree training programs be upgraded to the point that a high percentage of those taking the nursing examination from these programs will be qualified to do nursing
- 3) also the output of BS degree nurses be increased

VICE SPEAKER OF THE HOUSE: It has been moved and seconded that Resolution "C" be adopted.

Is there discussion? [No response]

If not, those in favor please say "aye"; opposed "no".

It is adopted.

DR. NAUMOFF: The next resolution taken up was Resolution "B" which was introduced by the Committee on Community Health on the training of family physicians. We recommend that this resolution be adopted.

Resolution: B

Introduced by: Committee on Community Health
(Rural and Urban)

Subject: Training of Family Physician

WHEREAS, the House of Delegates of the Medical Society of the State of North Carolina in a previous session has gone on record as favoring the establishment of an American Board of Family Practice by the American Medical Association; and

WHEREAS, it is felt that the establishment of such a Board will help lead to the increase in the number of family physicians; and

WHEREAS, there still exists the need for such physicians; and

WHEREAS, resident programs for the training of such physicians will be created in hospitals capable of teaching such physicians; and

BE IT RESOLVED, that the Medical Society of the State of North Carolina go on record as urging hospital facilities in North Carolina which are capable of meeting the requirements for residency programs to train family physicians, establish such residency programs as soon as possible, and work toward the approval of such programs by the AMA Council on Medical Education as soon as possible.

VICE SPEAKER OF THE HOUSE: Adoption of Resolution "B" has been moved and seconded. Is there discussion?

[No response]

If not, those in favor please say "aye"; those opposed "no".

It is adopted.

DR. NAUMOFF: The next resolution is Resolution No. 7 introduced by the Pitt County Medical Society and the subject was "Uniform type of identification card for third party payment of medical care".

Resolution: 7 (A-69)

Introduced by: Pitt County Medical Society.

Subject: Uniform type of identification card for third party payment of medical care.

WHEREAS, many of the citizens of the State of North Carolina have medical insurance and,

WHEREAS, many more of the citizens of the State of North Carolina will be covered under third party payee (i.e. Medicare and Medicaid) and,

WHEREAS each doctors' office now spends a significant amount of time completing insurance forms and,

WHEREAS this amount of time will increase in the future,

BE IT RESOLVED that the House of Delegates of the Medical Society of the State of North Carolina strongly urge the various third party payees (and especially North Carolina Blue Cross Blue Shield, and the payee for Medicare and Medicaid) that they formulate a payment system that would include the following:

1. A standard form as to size and format.
2. A specially designed form for the use of physicians.
3. A durable, wallet-sized card that the third party

payee would distribute which could be used on a standard imprinter and which would supply all information needed by the third party payee to identify the individual contract.

4. The imprinter to automatically imprint the physician's name, address and any code or identification number common to all third party payees.
5. Automatically make the required number of duplicates required by the third party payee.

AND BE IT FURTHER RESOLVED that the Insurance Industry Committee, The Blue Shield Committee and the Advisory Committee to North Carolina Department of Public Welfare of the Medical Society of the State of North Carolina be instructed to use their influence and persuasion to see that this resolution is implemented at the earliest possible time.

We recommend the adoption of this resolution.

The Committee would like to present to the House of Delegates some information that was received during the hearings at which time it was stated that North Carolina Blue Cross-Blue Shield at the present time is in the process of preparing just such a card to be used on an imprinter and they will be able to provide imprinters to the physicians of this State.

VICE SPEAKER OF THE HOUSE: The adoption of Resolution No. 7 has been moved and seconded.

Is there any discussion? [No response]

If not, those in favor of this adoption, please say "aye"; opposed "no".

The motion is carried.

DR. NAUMOFF: The next resolution is Resolution No. 1 introduced by the Chatham County Medical Society and the subject is "Request for insurance carriers to be instructed to include on all checks, etcetera, full name of insured".

Resolution: 1 (A-69)

Introduced by: Chatham County Medical Society.

Subject: Request for insurance carriers to be instructed to include on all checks, etc., full name of insured.

BE IT RESOLVED that the North Carolina Medical Society Blue Cross and Blue Shield Insurance Committee instruct the insurance carriers, Blue Cross and Blue Shield, to include on all checks, vouchers, and correspondence concerning same enough of the first name and middle initial of the insured to make it possible for easy identification in the field of the provider of medical care. As it is now, only the initial of the first name and the last name are on the various checks and vouchers which makes for confusion when a doctor has several J. DOEs in the files.

The Committee recommends the adoption of the following amended resolution:

Be it,

RESOLVED, that the North Carolina Medical Society Blue Shield Committee and the Insurance Industry Committee instruct all insurance carriers, including Blue Shield, to include on all checks, vouchers, and correspondence concerning same, enough of the first name and middle initial of the insured to make

it possible for easy identification in the files of the provider of medical care.

That is the end of the resolution. The rest of the paragraph is merely explanation and I will now read it to you.

We would also like to notify the House of Delegates that the following information was received during the course of its deliberations: That North Carolina Blue Cross-Blue Shield has been doing this for the past few months and thereby rectifying the situation as far as they are concerned.

VICE SPEAKER OF THE HOUSE: Resolution No. 1 has been amended by Reference Committee I and, as Dr. Koonce explained to you, this is an amended motion which will be voted on first.

Is there any discussion of the amended motion?

(Discussion ensued.)

Those favoring the amended motion which is before you as an amended resolution, please say "aye"; opposed "no".

The amended motion is adopted and the original resolution will not be voted upon.

Dr. Naumoff!

DR. NAUMOFF: The next resolution is Resolution "H" introduced by the Committee on Professional Insurance, the subject: "Proposal of Daily In-Hospital Money Payment Plan by Kemper Insurance Group."

Resolution: H

Introduced by: Committee on Professional Insurance

Subject: Proposal of Daily In-Hospital Money Payment Plan by Kemper Insurance Group

BE IT RESOLVED, that the Medical Society of the State of North Carolina accept the proposed "Daily In-Hospital Money Payment Plan" by Kemper Insurance Group through Mr. Ralph Golden and his Agency, with all the stipulations proposed in Mr. James T. Barnes' letter and Mr. Golden's response; and that this information be presented to the Executive Council in May for endorsement.

1. Q) Is the \$25 dependent child premium extendable to each of the three hospital pay rate brackets?
 - A) The \$25 dependent child premium is not extendable to each of the three hospital pay rate brackets. The only dependent child coverage available is the \$10 per day benefit.
2. Q) Does the premium rate at each renewal increase as one's age increases and as per the bracket rates expressed in the proposal?
 - A) The premium rates do increase as the insured's age bracket changes. This is true for practically all group coverage. If this were a constant premium, the younger members would be sharing the cost of the older insureds where the loss ratio is much higher.
3. Q) It appears the \$20 and \$30 payment is not available to one past the age of 60 years?
 - A) Up to \$30 per day is available to members

to age 64. For age 65 and over, \$10 per day is the maximum.

4. Q) What underwriting rate will be in effect on applicants' premium if 500 applications are not obtained in the 90-day open period?
 - A) We anticipate keeping the same rates that are quoted, if we do not get 500 applications during the first 90 days; but only those applicants who are insurable will be accepted. If 500 or more apply, all applicants will be issued the "Daily In-Hospital Insurance".
5. Q) Is it possible the "charter enrollment period" of 90 days could be enlarged?
 - A) I have been told that the Charter Enrollment Period may be extended to 120 days if necessary.
6. Q) If an applicant is accepted and then experiences an enforced military service (during which he is recognized as an "Active Exempt (dues) Member" is excluded from coverage for the interim; can this one re-enter the plan of coverage without underwriting or disturbing the original plan premium rate applicable to this age?
 - A) An insured, called into the Military Service, may resume his coverage by notifying Kemper Insurance Company within 90 days of his return to civilian status. His premium will be the rate that is in force at the time for his age group.
7. Q) We note the proposal uses "active member" in the first eligibility paragraph. Would not this tend to exclude insurable active practicing "Life Members"; "Affiliate Members"; and "Intern-Resident Members"; whereas, some Life Members are under 60 years and others 60 years to "above 65"; whereas, Affiliates tend to be younger men in hardship case groups; and, whereas, Intern-Residents are usually quite young? Too, we carry some exempt "Active Members" during periods of inactive practice due to disability? One would suppose some of the latter should have underwritten access?
 - A) It has never been, nor would it be, the intent of the Insurance Company to direct what the Society's membership criterion is. All physicians considered by the Society as being members will be eligible for this program.
8. Q) The proposal conditions the acceptance of same not later than March 16, 1969—obviously not possible as Committee review and Society endorsement cannot be vitally accomplished earlier than May 18, 1969.
 - A) The Company has extended the date for acceptance of this proposal to September 16, 1969.

The Committee recommends the adoption of this resolution.

VICE SPEAKER OF THE HOUSE: The adoption of Resolution "H" has been properly moved and seconded.

Is there any discussion? [No response]

If not, those in favor of this resolution please say "aye"; opposed "no".

The resolution is adopted.

DR. NAUMOFF: The next is Resolution No. 8 introduced by the Pitt County Medical Society, subject: "Bank Credit Cards".

Resolution: 8

Introduced by: Pitt County Medical Society

Subject: Bank Credit Cards

WHEREAS, banks are issuing many credit cards to their clients throughout the State of North Carolina; and,

WHEREAS many patients are requesting the use of these cards for payment of their medical bills; and,

WHEREAS the Judicial Counsel of the American Medical Association has recommended certain principles for the guidance of physicians in regards to the acceptability of credit cards,

BE IT RESOLVED that the House of Delegates of the Medical Society of the State of North Carolina go on record that each county society or individual member decide whether or not they will accept bank credit cards in payment for medical services. This Committee recommends the adoption of the following amended resolution:

Be it,

RESOLVED, that the House of Delegates of the Medical Society of the State of North Carolina go on record that each county society decide whether or not its members may ethically accept the bank credit card in payment for medical services in accordance with the opinion of the Judicial Council of the American Medical Association.

VICE SPEAKER OF THE HOUSE: Again, the Committee is proposing an amended resolution. Is there any question about this? [No response]

Is there any discussion on the amended resolution? [No response]

If not, those in favor of this amended resolution, please say "aye"; opposed "no".

It is adopted.

DR. NAUMOFF: Next is the Report of the Mental Health Committee on the role of the physician in suicide prevention presented by the ad hoc Committee on Suicide Prevention of the Mental Health Committee. (See pages 214-218 of Minutes of May 1969 Executive Council Meeting)

This Committee recommends approval of the recommendations of this report with the exception that the word "should" on page 2 of the report, replace the word "must" on lines 17 and 21 of the recommendation.

VICE SPEAKER OF THE HOUSE: This, again, constitutes an amended resolution to a very slight degree in that one word has been changed, so we will vote on it as recommended using the word "should".

Is there any discussion of the amended resolution

proposed by the Reference Committee? [No response]
If not, those in favor please say "aye"; opposed "no".

The resolution as amended is adopted.

DR. NAUMOFF: Next is Resolution "A" presented by the Committee on Community Health, subject: "Mental and Physical Examinations for Children entering Elementary School".

Resolution: A

Introduced by: Committee on Community Health (Rural and Urban)

Subject: Mental and Physical Examinations for children entering elementary school.

The Medical Society of the State of North Carolina go on record as supporting and endorsing comprehensive physical and mental examinations for all students about to enter elementary school in order that physical and mental defects are discovered and that those individuals be referred for competent professional help and appropriate school placement.

This recommendation to be the Executive Council and the House of Delegates of the Medical Society of the State of North Carolina.

It is the recommendation of the Committee that this resolution be rejected for the reason that it would lead to a demand for services which we cannot provide due to the shortage of medical manpower. While the Committee is in accord with the aim of this resolution, it is felt that it would be impossible to implement at this time.

VICE SPEAKER OF THE HOUSE: Once again, as your Speaker explained, we will vote on the resolution which is a positive motion that the resolution be accepted.

We will vote on the resolution then, not on the recommendation that it be rejected, but on the resolution.

Is there any discussion? [No response]

Those favoring the resolution, Resolution "A", please let it be known by saying "aye"; opposed "no".

The resolution is defeated.

DR. NAUMOFF: The next is a recommendation of the Nominating Committee of the Medical Society of the State of North Carolina to the effect that the tenure of office as well as total number of times a person could be re-elected to that office even after having been out of office for a period of time.

It is the recommendation of this Reference Committee that this matter be referred to an ad hoc committee appointed by the President and that a report should be rendered to the Executive Council at its fall meeting so that instructions can be given to the Committee on Constitution and By-Laws if it so recommends for changes to be prepared for presentation to the House of Delegates at its next meeting in May.

VICE SPEAKER OF THE HOUSE: The recommendation of this committee concerning the request from the Nominating Committee has been moved and seconded that it be adopted.

Is there any discussion? [No response]

Those favoring the adoption of the recommending

of setting up a special ad hoc committee say "aye"; opposed "no".

It is adopted.

DR. NAUMOFF: Next is Resolution No. 3 introduced by the Edgecombe-Nash Medical Society, the subject: "Sex Education Program in North Carolina Schools".

Resolution: 3

Introduced by: Edgecombe-Nash Medical Society
Subject: Sex Education Program in North Carolina Schools

The Medical Society of the State of North Carolina endorsed the Family Life Education Program in our schools in 1965. It appears that this was innocently done with good intentions. It has now become quite clear that the "Family Life Education Program" encompasses many subjects which are undesirable and which, if properly named, could not stand alone on their own merit. Furthermore, sex education, perversion, permissiveness, and sexual experimentation are being encouraged under a SIECUS (Sex Information and Education Council for the U. S.) type of program which intentionally avoids morality as a guide for influencing the use of the newly acquired information. The Medical Society of the State of North Carolina has no control over curriculum presented under its sponsorship. It now appears that the prestige of our organization has been intentionally sought and used in a way which can only discredit us and bring shame and embarrassment to us.

THEREFORE, be it resolved that the Edgecombe-Nash Medical Society withdraw its sponsorship of the Family Life Education Program and instruct its delegates to the Medical Society of the State of North Carolina to introduce this resolution at the forthcoming state meeting and to work toward the passage of this resolution by our state organization,

FURTHERMORE, be it resolved that the Edgecombe-Nash Medical Society condemn the further use of SIECUS type sex education programs in our schools at any grade level,

FURTHERMORE, the Edgecombe-Nash Medical Society takes the position that there can be no proper sex education which is not heavily influenced and tempered by morality.

On the basis of the evidence presented to this Reference Committee, it is recommended that this resolution be rejected and that the following statement be approved by the House of Delegates:

The Medical Society of the State of North Carolina reaffirms its conviction of the need of proper sex education in our school system and reaffirms its approval of the family education program.

However, it recognizes that the material presented for this purpose should be judiciously monitored and screened at the state and local levels by responsible officials of health and educational institutions involved, by state and local physician representatives as well as representatives of responsible lay personnel.

VICE SPEAKER OF THE HOUSE: The Chair will rule that this represents two separate actions.

One, to accept or reject Resolution No. 3 and the second action to reaffirm the last two paragraphs there in Reference Committee Number 1 report.

Is there any question about this format?

DR. NAUMOFF: This is not a substitute motion.

This Reference Committee is merely asking this House, at the present time, to either affirm or disapprove of a statement that we felt should be made.

It is not in the form of a resolution.

VICE SPEAKER OF THE HOUSE: Are there further questions?

DR. LLOYD BAILEY: So there will be an opportunity for further discussion after we vote on the original resolution?

VICE SPEAKER OF THE HOUSE: Yes, sir, there will be.

It may be those who will vote one way on that issue will vote differently on the second part of that recommended by the Reference Committee.

Is there further discussion concerning Resolution No. 3?

DR. GLASSON: Question!

VICE SPEAKER OF THE HOUSE: All those in favor of the adoption of Resolution No. 3 let it be known by saying "aye"; opposed "no".

The Chair rules that the resolution is rejected.

It has been moved and seconded by the Reference Committee that the last two paragraphs of its report be accepted.

Strictly as a recommendation.

DR. NAUMOFF: It is not a resolution.

VICE SPEAKER OF THE HOUSE: Dr. Bailey!

DR. BAILEY: Mr. Vice Speaker, I would like to amend or add to what has been submitted by the Reference Committee; and that is to take from the original resolution the last sentence and I shall read that now. I think this is very important and that this gets at the "meat" of the whole issue.

"Furthermore, the Medical Society of the State of North Carolina takes the position that there can be no proper sex education which is not heavily influenced and tempered by morality."

VICE SPEAKER OF THE HOUSE: Is there a second to this amendment?

DR. ROBERT A. ROSS: Second.

VICE SPEAKER OF THE HOUSE: An amended motion has been made and seconded. Is it clearly understood by everyone; that is to add the following paragraph to the statement which you have before you which says:

Furthermore, the Medical Society of the State of North Carolina takes the position that there can be no proper sex education which is not heavily influenced and tempered by morality.

Is there discussion of the amended motion? Discussion ensued.)

VICE SPEAKER OF THE HOUSE: Dr. Naumoff!

DR. NAUMOFF: I don't believe that this State Society has ever said that we approve of every pro-

gram on sex education in the schools that's being presented in the State.

We have merely approved the recommendations and program of Family Life Education Program; we have given them our endorsement. This doesn't mean that we approve everything that is presented at the school level.

DR. LENOX D. BAKER [Durham]: Question!

VICE SPEAKER OF THE HOUSE: All right, just the addition of the statement.

We are now voting on the most recent amendment and that is to add to the statement, the last sentence in the resolution. If this is adopted, then the amended motion including the adoption of the statement that you have on your blue sheet, will then be voted on.

We will now vote whether or not to accept the statement with the inclusion of the last paragraph of Resolution 3.

Those in favor of this say "aye"; those opposed.

It is included and we will now vote on the statement—

DR. NAUMOFF: Ask for a head count!

VICE SPEAKER OF THE HOUSE: All right.

A count has been called for on whether or not the statement will be included.

All those in favor of adoption of the last paragraph which is:

Furthermore, the Medical Society of the State of North Carolina takes the position that there can be no proper sex education which is not heavily influenced and tempered by morality.

Those favoring the inclusion of this statement into the amended motion, please raise your hand.

Please keep them up for just a moment!

[There followed a counting of raised hands.]

All right, lower your hands please.

Those opposed to the inclusion of this paragraph please raise your hands.

Keep them up and the tellers will be with you.

[There followed a counting of raised hands.]

DR. WILKERSON: The count is 70 favor to 31 against.

VICE SPEAKER OF THE HOUSE: This paragraph is included in the amended motion and we will now vote on that. This includes the last two paragraphs we were talking about, plus the "Furthermore . . ." that I just read to you.

Those in favor of the adoption of this statement please say "aye"; opposed "no".

The amended motion is accepted and the original motion will not be considered.

Dr. Naumoff!

DR. NAUMOFF: We now come to the last resolution, or the last report of the ad hoc Committee on the Relationship to North Carolina Blue Cross-Blue Shield.

The Reference Committee divided this report into three sections as follows:

First, the report itself; second, the statement of understanding; and third, the proposed amendment to the By-Laws.

**REPORT OF THE
ad hoc COMMITTEE ON THE RELATIONSHIP
TO NORTH CAROLINA
BLUE CROSS-BLUE SHIELD
May 1969**

AUTHORIZATION:

By direction of the 1968 House of Delegates, upon the adoption of a resolution submitted by the Mecklenburg County Society, President David G. Welton appointed a nine member committee to "study in depth and to give comprehensive reports and recommendations regarding the best organizational and functional relationship for the Medical Society of the State of North Carolina and Blue Cross-Blue Shield plans, such committee being selected from the major practice interests of the Medical Society of the State of North Carolina".

COMMITTEE:

Thomas L. Dulin, M.D., Charlotte, General Practice
Ladd W. Hamrick, Jr., M.D., Concord, Internal Medicine
Harvey C. May, M.D., Charlotte, Obstetrics and Gynecology
Samuel D. McPherson, M.D., Durham, Ophthalmology
Thomas R. Nichols, M.D., Morganton, Internal Medicine
George W. Paschal, Jr., M.D., Raleigh, General Surgery
William H. Sprunt, III, M.D., Raleigh, Radiology
Charles W. Styron, M.D., Raleigh, Internal Medicine
John S. Rhodes, M.D., Raleigh, Urology, CHAIRMAN

HISTORY:

The Committee initiated its study with attention to the history of the voluntary health insurance movement in North Carolina ranking among the pioneers in the development of prepayment plans. Physicians had a key role in the founding of the Hospital Care Association in 1933 and the Medical Society sponsored Hospital Saving Association in 1935. The work of the Hart Committee in creating the "Doctor's Plan", the abandonment in 1952 of a proposed Medical Society operated Blue Shield Plan and the merger, long advocated by the Medical Society. Hospital Care and Hospital Saving of January 1968 were topics discussed.

NORTH CAROLINA BLUE CROSS-BLUE SHIELD:

The merged organization is operated under direction of a Board of Trustees formed by consolidation of boards of the two merged plans. The charter of North Carolina Blue Cross-Blue Shield provides for equal representation on its Board of members from the Hospital Association, the Medical Society and the public. The Board is presently constituted by eight members from each of these three categories. Members elected by the Hospital Association and the Medical Society in turn select the public members. Terms are four (4) years on a staggered basis with no limitation on re-election. The President-Elect of the Medical Society is ex-officio member of the Board which meets quarterly. Monthly meetings are held by the Executive Committee appointed from the Board. In 1967 election of the physician members was transferred from the General Session to the House of Delegates.

It is recognized that present physician members of the Board are men of competence and good judgment.

OTHER STATE PLANS:

With reference to Organizational structures of plans in other states, time has not permitted the committee to accomplish an in depth study of operation. Review of six representative plans indicates a wide range of structure from Blue Shield programs controlled entirely by a Medical Society to totally integrated Blue Cross-Blue Shield plans with broad representation on the board. It should be noted membership of a state plan in National Blue Shield is predicated upon endorsement of the plan by its respective State Medical Society.

NATIONAL BLUE SHIELD:

In October 1968, the Committee Chairman, with representatives of management and members of the Board of Trustees of North Carolina Blue Cross-Blue Shield and members of the Blue Shield Committee attended a special meeting of National Blue Shield in Chicago. At this meeting plan standards for membership in National Blue Shield were amended to require that each Blue Shield plan offer comprehensive certificates based on usual, customary and reasonable charges. This does not preclude the sale of coverage at a percentage of these benefits.

NEW CERTIFICATES:

Immediately upon the merger of the two plans into the North Carolina Blue Cross-Blue Shield, Inc., the corporation, with the guidance of the Blue Shield Committee, began to develop new patterns of benefits embodying expanded out-patient coverage and balanced benefits for professional services. Certificates under the "Doctor's Plan" will be phased out and all "under 65" certificates will be converted to the new program. Participating agreements with physicians will be discontinued. Disputed claims will be submitted to the Blue Shield Committee for "peer" review and adjudication. In an effort to improve rapport with physicians, the corporation is publishing a bi-monthly news letter directed to physicians and office personnel. Under the Division of Blue Shield Activities, the Corporation has assigned a manager of Professional Relations to supervise five Professional Relations representatives, each responsible for a geographic area and available for consultation with physicians and their office assistants on matters pertinent to Blue Shield coverage.

THE BLUE SHIELD COMMITTEE:

The ad hoc Committee recognizes and applauds the dedicated and unselfish service of the Blue Shield Committee over the years since it was established in 1952. While concerned primarily with the "Doctor's Plan", representatives of the corporation assert that guidance of the committee has frequently been sought on other matters. The "phasing out" of the "Doctor's Plan" renders the current By-Law governing the Blue Shield Committee obsolete. After careful review, the ad hoc Committee proposes that the Blue Shield Committee be continued and strengthened and that, within the proper legal relationship, the physicians of North Carolina, through their elected representatives, should

accept full responsibility for appropriate matters related to the insuring of professional services under Blue Shield as administered by North Carolina Blue Cross-Blue Shield. Fiscal administration and collection of professional fees has increasingly and inevitably shifted to third parties under prepayment plans. Just as it is the responsibility of the insurer to guard and dispense properly the subscribers' fund, it is no less the right and obligation of the medical profession to establish and apply the principle of usual, customary and reasonable charges for professional service. The physician who may become involved in a fee dispute is entitled to be judged after "peer" review by knowledgeable physicians within his own area of practice. To broaden representation on the Blue Shield Committee geographically and practice-wise, it is recommended that Chapter X, Section 16 of the By-Laws be deleted and a new section inserted therefor. (copy attached). By authority of the Executive Council granted March 23, 1969, the proposed amendment has been directed to the Committee on Constitution and By-Laws. It is anticipated that the Blue Shield Committee will continue to exercise its prerogative to establish its own appropriate functional organization.

THE STATEMENT OF UNDERSTANDING:

In March 1957 the Medical Society developed with the two plans identical statements of understanding to act as guidelines for the functions of the Blue Shield Committee and to create physicians participating agreements under the "Doctor's Plan". This statement of understanding is made obsolete by the elimination of the "Doctor's Plan" and participating agreements. A new Statement of Understanding is submitted for consideration. (see attached document).

Independent thinking and divergent ideas have characterized deliberations of the ad hoc Committee. None the less there has been general agreement that the primary objective of the committee is to suggest mechanisms to upgrade communications between all bodies concerned with the Blue Shield plan in North Carolina and thereby to assure a continuing spirit of cooperation between the profession and the corporation.

To this end, and based on study to this date, the committee submits the following recommendations:

1. It is practical to continue the present representation of the Medical Society on the Board of North Carolina Blue Cross-Blue Shield at this time.
2. Delete Chapter X, Section 16 of the By-Laws and consider inserting in lieu thereof the following amendment: (see attached copy).
3. Consider a new Statement of Understanding. (see attached document).
4. Request North Carolina Blue Cross-Blue Shield to add the Chairman of the Blue Shield Committee to the Board of Trustees in ex-officio capacity.
5. That physician members of the Board of Trustees of North Carolina Blue Cross-Blue Shield and members of the Blue Shield Committee elected by

the Medical Society be limited to two (2) consecutive four (4) year terms.

6. That Agendas and minutes of the Board of Trustees and the Blue Shield Committee be exchanged. That the President of the Medical Society be requested to implement this exchange of information promptly.
7. That the Committee be continued for one year to permit further study.

The ad hoc Committee acknowledges with gratitude resources of information supplied by members of the Board of Trustees and management personnel of North Carolina Blue Cross-Blue Shield, members of the Blue Shield Committee and other physicians.

STATEMENT OF UNDERSTANDING

I. A long-standing spirit of cooperation and formal liaison between the Medical Society and Blue Cross and Blue Shield in North Carolina has existed since 1935 in the interest of financing better health care for citizens of the State. A "Statement of Understanding" between the Medical Society and the former Associations was executed on March 2, 1957 (see copy attached) and now requires revision for the purpose of adapting the relationship to changed circumstances, the most significant of which are:

1. The January 1, 1968 consolidation of the former Associations into the new North Carolina Blue Cross and Blue Shield Corporation.
2. The elimination of under-age 65 income limit "Service Benefit," programs by the consolidated Corporation, thus phasing out the former "Doctors Program" plans and rendering of no effect the former income limit based participating physicians agreements. (The new Corporation will sell professional benefits coverage only on the basis of scheduled indemnity allowances or coverage on the basis of a percentage of usual, customary, and reasonable charges.)
3. Increased support of Blue Shield by the American Medical Association as expressed through resolution passed by its House of Delegates meeting in December, 1968 which reaffirmed the AMA's support of medically-oriented prepayment and urged expansion of the scope and level of benefits under the principles of: strong physician leadership with a controlling voice in policy, voluntary subscriber participation, free choice of physician, and the use of usual and customary and reasonable charge concepts.

II. BOARD OF TRUSTEES—NORTH CAROLINA BLUE CROSS AND BLUE SHIELD, INC.—The Medical Society of the State of North Carolina shall elect physicians to the Board of Trustees of the Corporation and has exercised such right continuously through the antecedent Associations since 1935. Such elected Physician Trustees comprise one-third of the membership of the Board and, in conjunction with another one-third of the Trustees elected by the North Carolina Hospital Association, have an equal voice in the selection of the remaining one-third of Trustees representing the citizens of North Carolina.

Elected Physician Trustees have full and equal authority with other Trustees to govern the affairs of the Corporation under the provisions of the Corporations Enabling Act and By-Laws.

III. THE BLUE SHIELD COMMITTEE OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA—The Medical Society shall elect a group of physicians as a committee of the Medical Society in accordance with the Constitution and By-Laws of the Medical Society.

Subject to jurisdiction of the Executive Council and House of Delegates of the Medical Society, the Board of Trustees of the Corporation, the North Carolina Department of Insurance, and applicable laws, it is proposed that the Blue Shield Committee with respect to Blue Cross and Blue Shield subscriber benefits for services provided by physicians licensed to practice medicine and surgery shall represent and act for the Medical Society and have the following rights and privileges:

1. To increase, decrease, add to, or delete indemnity scheduled allowances.
2. To assign equitable allowances for professional services of a new, unusual, or complicated nature which are within the scope of certificate benefits but not specifically listed in schedules of professional benefits.
3. To determine allowances when benefits are paid on the basis of usual, customary and reasonable charges.
4. To arbitrate benefit allowances in cases disputed by physicians, or the Corporation.
5. To assign partial allowances or allowances reduced on a percentage basis when multiple procedures or services are provided, or when services are provided concurrently by two or more physicians.
6. To advise and counsel, when requested by the Corporation or upon its own volition, concerning all aspects of subscriber contracts and the Corporation's communication with physicians through use of publications, letters, and personal contacts by the Corporation's Professional Relations Representatives.
7. The physician members of the Board of Trustees of North Carolina Blue Cross-Blue Shield may meet with the Blue Shield Committee at the request of the Committee Chairman of the Trustees.

PROPOSED BY-LAW CHANGE

Chapter 10, Section 16

Review Chapter 10, Section 16 of the Constitution and By-Laws of the Medical Society of the State of North Carolina.

The entire Section should be deleted and the following inserted in lieu thereof:

The Blue Shield Committee will consist of twenty-seven (27) members: two (2) from each of the thirteen (13) major specialty practice Sections recognized by the Medical Society plus a Chairman. The first year, twenty (20) members, two (2) from each Medical Society District, and a chairman will be elected by the House of Delegates at its annual meeting. The prac-

tice specialty and duration of tenure (1, 2, or 3 years) will be determined by the outgoing president initially and, henceforth, each year at the annual meeting, eight (8) new members will be elected to the committee for three year terms and chairman will be elected for a one year term. Succeeding members of the committee will be from the same practice group of his predecessor unless the then president makes not greater than four (4) balancing changes prior to the annual meeting. Two (2) committee members will be appointed for one year terms at the discretion of the new president, after consultation with the next immediate past-president, but he at all times must maintain the practice balance of two members from each specialty Section.

The chairman may succeed himself two times and may serve again after two years off the committee.

Sub-specialty groups will be expected to supply consultative "peer" review advice on request of the committee.

The full committee shall hold quarterly meetings, announced no less than three months in advance, and more frequent meetings called at the discretion of the chairman or by request of not less than eight (8) of the committee members. A portion of each meeting shall be held in Executive Session.

The availability of the services of the Blue Committee to the physicians of the State of North Carolina will be publicized at each annual meeting of the Medical Society and at least twice during each year in official publications of the Medical Society of the State of North Carolina.

I think, Mr. Speaker, they should be taken up individually:

The Committee recommends that the recommendations of this Committee be accepted by the House of Delegates with the exceptions that Recommendation No. 5 pertaining to tenure of office of members of the Board of Trustees be deleted and this was decided upon because it was the feeling that if our recommendation, as far as the Nominating Committee report is concerned would pass, this was no longer necessary.

Secondly, that No. 6 pertaining to exchange of information between the physician members of the Board of Trustees and the Blue Shield Committee be deleted.

This was decided upon because if we accept this report, as presented, and according to their recommendation, Recommendation No. 4 states that North Carolina Blue Cross-Blue Shield to add the Chairman of the Blue Cross Committee to the Board of Trustees in an ex-officio capacity and, therefore, he would be present to receive any information necessary so far as the deliberations of the Board of Trustees are concerned in regard to professional services.

Also, the Committee received information that at the present time the Blue Cross-Blue Shield organization in this State is now sending out almost immediately information with regard to professional services to each and every member of this Society.

We recommend that the report itself be approved

with the deletions in paragraphs No. 5 and No. 6.

VICE SPEAKER OF THE HOUSE: You have heard the motion which is duly made and seconded.

Is there discussion? [No response]

If not, those in favor of adoption of this report please say "aye"; opposed "no".

It is adopted.

DR. NAUMOFF: We now come to the Statement of Understanding.

This Committee recommends the adoption of the Statement of Understanding as presented by this ad hoc committee.

VICE SPEAKER OF THE HOUSE: This motion is also duly made and seconded.

Is there any discussion of this? [No response]

If not, those favoring the adoption of this motion please say "aye"; opposed "no".

It is adopted.

DR. NAUMOFF: Now, with regard to the proposed amendment, this Committee recommends the adoption of the proposed change in By-Laws of Chapter X, Section 16 as it pertains to the structure and duties of the Committee on Blue Shield.

VICE SPEAKER OF THE HOUSE: Dr. Shaffner!

DR. SHAFFNER: This is the same amendment as read to you at the first meeting, at the top of page two of your green sheets.

Amend Chapter X, Section 16 of the By-Laws by deleting the entire wording and inserting in lieu thereof the following:

Beginning in 1970 a Committee on Blue Shield consisting of 26 members shall be initially elected by the House of Delegates, 8 members for one year, 8 members for two years, and 10 members for three years, so that in the first year there will be two members from different medical districts and with different terms of office representing each of the major practice specialties; namely, surgery, internal medicine, obstetrics and gynecology, pediatrics, ophthalmology and otolaryngology, general practice, neurology and psychiatry, radiology, pathology, anesthesiology, orthopedics, dermatology and public health and education. In each succeeding year, the House of Delegates shall elect for a term of three years new members representing the several specific specialties necessary to replace those whose terms expire that year. A member may be re-elected to the Committee only after he has been off the Committee two or more years.

Each year the Committee shall select one of its members as Chairman who shall be eligible for re-selection to that position during his three year term.

It shall be the duty of this Committee to advise and counsel with the membership on all matters relating to claims or any other business they may have with the North Carolina Blue Cross and Blue Shield, Inc., to inform the physician members of the Board of Trustees of that corporation of any matter deemed worthy of consideration and action by that board, and to advise and counsel with representatives of that corporation on any matters of

mutual concern. The committee may organize itself into subcommittees for claims review and other activities, and may meet as often as advisable but the whole committee shall announce and hold each year at least four open meetings at which any member of the Society may present items for consideration by the Committee.

VICE SPEAKER OF THE HOUSE: The motion to change the By-Laws has been made and seconded. Is there discussion?

[No response]

If not, those in favor of the motion, please say "aye"; opposed "no".

It is adopted.

DR. NAUMOFF: Mr. Chairman, on behalf of the Committee and all who appeared before the Committee yesterday, I want to thank you. I think it was a very revealing and good experience for everybody involved.

I particularly want to thank the other member of the committee and our recorder for the fine work they have done.

Thank you.

[Applause]

VICE SPEAKER OF THE HOUSE: Dr. Naumoff, we appreciate very much this fine work and I would now like to have a motion that this complete report be accepted.

[The motion was made and seconded from the floor.]

Any discussion? [No response]

Those so favoring please say "aye"; opposed "no".

It is accepted.

SPEAKER OF THE HOUSE: Do you know, I think he'd do better if I wasn't up here pestering him all of the time! He certainly doesn't need me!

I hope I can do as well with the report of Reference Committee II as he did on I but with the confusion that I'm sure my friend, Jack Hughes, will give me, I'll do the best I can.

Come on up here, Jack!

DR. JACK HUGHES: Mr. Speaker, Members and Guests:

This constitutes the report of Reference Committee II. There are a number of grammatical changes which I will not bother to go through. I think they will be evident to you as we come to them. There are a couple of words added here and there that were inadvertently left out, which in a couple of situations could change the meaning slightly, so I trust that you will follow closely and I will try to indicate those.

The first item is a combination of Resolution "D" on Traffic Safety and Resolution No. 6 on Implied Consent Law and this, therefore, constitutes a substitute motion which Reference Committee II recommends that the House of Delegates approve.

Now, therefore, be it,

RESOLVED, that the Medical Society of the State of North Carolina recognizes the serious dangers inherent in the immoderate use of alcohol before driving and urges all motorists to refrain from consuming alcohol before driving, and be it further

RESOLVED, that the Medical Society of the State of North Carolina endorses and supports implied consent laws and other programs and policies designed to reduce the incidence of driving by persons while under the influence of alcohol and be it further

RESOLVED, that the Medical Society of the State of North Carolina go on record as urging the State Legislature to adopt legislation which will make illegal the operation of a motor vehicle by anyone whose blood alcohol level is 0.10 per cent (100 milligrams per cent) and above, and be it further

RESOLVED, that a copy of this resolution be sent to the Governor of the State of North Carolina, the Speaker of the House of Representatives, the Lieutenant Governor and the Commissioner of Motor Vehicles.

I move the adoption of this resolution.

SPEAKER OF THE HOUSE: It has been moved and seconded that this substitute resolution be adopted. Do I hear any discussion? (Discussion ensued.)

Any further questions?

DR. HUBERT C. PATTERSON [Orange County]: Does "motor vehicle" include—boats and aeroplanes and tractors?

DR. HUGHES: I'm sure it would include tractors. I would ask our consultant, Dr. Wilkerson.

DR. CHARLES WILKERSON: Mr. Speaker, it is my understanding the Department of Motor Vehicles is responsible for those on the land and it does not have any jurisdiction over the types of motorized equipment which is operated on water.

I think we have two representatives from the Department of Motor Vehicles here.

SPEAKER OF THE HOUSE: We would be glad to have any remarks from either one of you two gentlemen.

Would you like to make any remarks, sir?

MR. JOSEPH GARRETT [Commissioner, Department of Motor Vehicles]: Mr. Chairman and gentlemen:

Dr. Wilkerson is right. Our jurisdiction is only on vehicles operated on the high ways in North Carolina.

SPEAKER OF THE HOUSE: Any further questions?

Those in favor of the substitute motion, let it be known by saying "aye"; opposed "no".

So be it.

DR. WILKERSON: Mr. Speaker!

SPEAKER OF THE HOUSE: Yes, Dr. Wilkerson!

DR. WILKERSON: Would you allow me to make a motion from the floor at this time?

SPEAKER OF THE HOUSE: State your business and we'll find out whether you can or not.

DR. WILKERSON: I would like to make a motion that this House of Delegates ask and request Mr. Joseph Garrett and Mr. Ed. Wade, Commissioner of Motor Vehicles and Director of Driver Licenses Division, to carry this resolution with them to the Senate Highway Safety Committee meeting tomorrow.

SPEAKER OF THE HOUSE: That is a motion he would like to make.

Do I hear a motion that this be accepted (business)

by two-thirds—vote, but do you accept it, "aye"; any opposed?

Since it's unanimous, I consider that it is accepted. Now, make your motion!

DR. WILKERSON: Mr. Speaker, I make a motion that the House of Delegates of the Medical Society of the State of North Carolina request Mr. Joe Garrett and Mr. Ed. Wade to carry the resolution which has just been passed from Reference Committee II, which is a combination of Resolution "D" and Resolution No. 6, to the Highway Safety Committee of the State of North Carolina Senate meeting tomorrow morning.

SPEAKER OF THE HOUSE: Any second to that motion?

[The motion was severally seconded.]

All those in favor let it be known by saying "aye"; opposed "no".

[The motion carried unanimously.] Proceed!

DR. HUGHES: Resolution "E", Safety Frame and Roll Bar for Tractors.

Resolution: E

Introduced by: Committee on Community Health (Rural and Urban)

Subject: Safety Frame and roll bar for tractors

WHEREAS, approximately fifty people are killed in the State of North Carolina from tractor turn-over accidents every year; and

WHEREAS, most of these deaths can be prevented by proper safety frames on these tractors; and

WHEREAS, such frames are available and can be installed; and

WHEREAS, it is the duty of the Medical Society of the State of North Carolina to call attention to those concerned with reference to health hazards,

BE IT RESOLVED, that the Medical Society of the State of North Carolina go on record as favoring the study and adoption, by the proper authorities, of framing on tractors which will prevent these deaths in rural areas.

Mr. Speaker, Reference Committee II recommends that the House of Delegates approve the following amended resolution:

Be it,

RESOLVED, that the Medical Society of the State of North Carolina go on record as favoring the study and adoption, by the proper authorities, of framing and other safety equipment on tractors which will prevent these deaths in rural areas.

Mr. Speaker, I move the adoption of this amended resolution.

SPEAKER OF THE HOUSE: It has been duly moved and seconded.

Any discussion? [No response]

Those in favor let it be known by saying "aye"; opposed "no".

So be it.

DR. HUGHES: Resolution "F", Environmental Pollution.

Resolution: F

Introduced by: Committee on Community Health (Rural and Urban)

Subject: Environmental Pollution

WHEREAS, the pollution of the air which we breathe continues to be an increasing problem and an increasing health hazard; and

WHEREAS, the pollution of water, likewise, has been recognized to a degree by the State Government,

BE IT RESOLVED, that the Medical Society of the State of North Carolina go on record as urging that steps be taken as rapidly as possible to clear our air of pollution and our streams of pollution and to prevent the pollution of our environment in all other respects,

FURTHER BE IT RESOLVED, that the Medical Society urge cooperation by the county medical societies with local authorities with regard to environment pollution control, our State Government, with the governments of other states and with the Federal Government, towards the end that our air will be cleared and our waters pure again; and

FURTHER BE IT RESOLVED, that the Air and Water Resource Board be asked to maintain strict enforcement of present water and air pollution control standards and to adopt new standards of air quality as soon as they become available.

Mr. Speaker, Reference Committee II recommends the House of Delegates approve the following amended resolution:

RESOLVED, that the Air and Water Resource Board be asked to maintain strict enforcement of present water and air pollution control standards and to adopt new standards of quality as soon as they become available.

Mr. Speaker, I move adoption of this resolution.

SPEAKER OF THE HOUSE: It has been moved and duly seconded.

Any discussion of this substitute resolution?

[No response]

Those in favor, let it be known by saying "aye"; opposed "no".

So be it.

DR. HUGHES: Resolution "G", Physical Examinations and Retirement Age for Government Officials.

Resolution: G

Introduced by: Committee on Community Health (Rural and Urban)

Subject: Physical examinations and retirement age of government officials

WHEREAS, community health and the health of the nation to an increasing degree is being influenced by activity of the Government; and

WHEREAS, the activity of the Government is dependent to a degree on the physical and mental vigor of the elected and appointed officials of the Government; and

WHEREAS, the Government has established the requirement for physical examinations and a retirement age for military services, Civil Service employees, and for those under Social Security; and

WHEREAS, with increasing longevity an increasing incidence of degenerative diseases appear; and

WHEREAS, the electorate with facts available are not always able to determine the mental and

physical qualifications of a potential government official; and

WHEREAS, the election or appointment of an individual impaired by mental or physical defect could lead to a disaster for this Nation; and

WHEREAS, the requirement for physical examinations and the establishment of retirement ages is nothing new to government; and

WHEREAS, it is felt that those who would guide the destinies of this great Nation would be physically and mentally able to do so,

BE IT RESOLVED, that the Medical Society of the State of North Carolina, carrying out part of its responsibility to the people, go on record as favoring that all officials seeking elective office or appointive office be required to give evidence as to their physical and mental fitness to serve in the Government; and also go on record as recommending the establishment of retirement ages not different from those of Civil Service Employees and that retirement ages be mandatory at this age.

BE IT FURTHER RESOLVED, that this Society go on record as favoring that the esrequirements be incorporated in the Constitution of The United States similar to the age requirements now stated therein, as relates to Federal officials.

BE IT FURTHER RESOLVED, that the Medical Society of the State of North Carolina request, through proper channels, that the Legislature of the State of North Carolina give consideration to instigating action as outlined in the Constitution towards obtaining such Constitutional change, by Constitutional amendment, and take such action that would be applicable to local and State officials.

BE IT FURTHER RESOLVED, that copies of this resolution be sent to each State Medical Society and presented as a resolution to the American Medical Association.

Mr. Speaker, Reference Committee II recommends that the House of Delegates disapprove this resolution. The Reference Committee considered this resolution unacceptable as presented and was unable to provide a satisfactory substitute resolution.

SPEAKER OF THE HOUSE: You are now voting on Resolution "G". The Reference Committee recommends that it not be approved.

Is there any discussion? [No response]

Those in favor of the resolution, let it be known by saying "aye"; those opposed to the resolution and in favor of the recommendation of the Reference Committee say "no".

It is denied.

DR. HUGHES: Resolution "T", Continuing Studies of Disasters.

Resolution: I

Introduced by: Committee on Disaster Medical Care

Subject: Continuing studies of disasters.

WHEREAS, disasters producing multiple numbers of casualties occur with alarming frequency; and

WHEREAS, such events provide a suitable setting and sympathetic laboratory for the responsible and

scientific study of the problems in disaster medicine; and

WHEREAS, the Division of Emergency Health Service of the U. S. Public Health Service in cooperation with the Committee on Disaster Medical Care, Council on National Security of the American Medical Association, the Committee on Trauma of the American College of Surgeons and the American Hospital Association has instituted a series of disaster studies; and

WHEREAS, the effective acquisition of data is dependent upon the cooperation of physicians; therefore be it

RESOLVED, that the American Medical Association inform the profession of the disaster studies, urging their cooperation in the program; and be it further

RESOLVED, that the Association provide the profession with guidelines for the acquisition of data on medical care rendered under disaster conditions, as well as the organization of the disaster medical force.

Mr. Speaker, Reference Committee II recommends that the House of Delegates approve the resolution as presented.

I move adoption of the resolution.

SPEAKER OF THE HOUSE: It has been moved and duly seconded that Resolution "I" be approved.

Is there any discussion? [No response]

Those in favor, let it be known by saying "aye"; opposed "no".

So be it.

DR. HUGHES: Resolution "J". Permanent Committee on Medical Education.

Resolution: J

Introduced by: ad hoc Committee on Medical Education

Subject: Permanent Committee on Medical Education.

WHEREAS the House of Delegates of the Medical Society of the State of North Carolina has at the Annual Meeting in May 1968, resolved that the Medical Society establish a permanent Committee on Medical Education to be composed of representatives from the medical schools in North Carolina, specialty organizations, including the Academy of General Practice in North Carolina, with no member serving for more than five years. The purpose of the committee would be to study student recruitment and quality and distribution of physicians and to recommend improvements in the education system which will be forwarded to the proper authorities for action; and

WHEREAS, as President David Welton has appointed an Ad Hoc Committee on Medical Education; and

WHEREAS, the Ad Hoc Committee on Medical Education has, following the charge of the House of Delegates studied the problems therein involved; and

WHEREAS, the Council on Planning (Blue No. 2) had in its report stated, "this Society should begin

now with planning that will require evidence of continuing education on the part of every and all physicians in the State. This could be done either on the basis of requirement for membership in the State or component societies or as a requirement or as a requirement for periodic re-registration of licensure. We must look forward to the day when the Medical Society of the State of North Carolina demands evidence of freshening and continuing post graduate education for all doctors of medicine in this State, as well as for certain echelons of the paramedics," and

WHEREAS, there exists a nationwide increase of the public awareness of the needs of continuing medical education among practicing physicians; and

WHEREAS, there exists a need for greater recruitment for medical students and for students in allied health fields; and

WHEREAS, the State Medical Society is the organization encompassing the largest number of physicians,

Therefore, this ad hoc Committee wishes to report that certain interim changes have made it advisable to seek from the House of Delegates a broader base for the function of the permanent committee on Medical Education. It therefore recommends the following By-Law changes to our Constitution:

AMEND Chapter X, Section 2, by adding to the list of standing committees the following: "A Committee on Medical Education" and further

AMEND Chapter X by adding another Section as follows:

Section 22: "A Committee on Medical Education consisting of at least ten members shall be the study, coordinating, liaison, and implementing committee with respect to all activities of the Society in the recruitment, the distribution, and the improvement in undergraduate, postgraduate, and continuing education of physicians and allied health personnel within the State. To this end the President should appoint members-at-large and members representing the medical schools in North Carolina, the medical specialty organizations, including the Academy of General Practice of North Carolina, and such other organizations and agencies in the field of medical education as deemed appropriate.

Appointments shall be made on a staggered basis: one-third for two years; one-third for four years; and the remainder for five years. At the expiration of any one term a successor shall be appointed for a term of five years. No one shall serve for more than one five-year term. Where a vacancy occurs, the successor shall be appointed for the remainder of that term.

The Committee shall report its activities and its recommendations to the House of Delegates and, in the interim, to the Executive Council, and upon approval shall endeavor to implement its recommendations."

Mr. Speaker, Reference Committee II recommends that the House of Delegates approve the following amended resolution:

RESOLVED, that the Medical Society of the State of North Carolina establish a permanent Committee on Medical Education and that the Society change the By-Laws as proposed by the ad hoc committee on medical education and modified by the Committee on Constitution and By-Laws.

SPEAKER OF THE HOUSE: I think we can vote on the Resolved, which is including the (by law) amendment. After we approve the amendment, then we'll vote on the resolution.

Dr. Shaffner!

DR. SHAFFNER: On your report of Reference Committee the amendments suggested by the Constitution and By-Laws Committee have not been inserted.

I will read to you the proposed change in the By-Law and the amendments recommended by the Constitution and By-Laws Committee, so it will not be exactly as on your blue sheet.

Amend Chapter X, Section 2 by adding to the list of standing committees the following: A Committee on Medical Education.

And, further, amend Chapter X by adding another section as follows:

Section 22:

A Committee on Medical Education consisting of at least ten members shall be the study, coordinating liaison and implementing committee with respect to all activities of the Society in the recruitment of, and in the improvement in undergraduate, postgraduate and continuing education of physicians and allied health personnel within the State. To this end, the President shall appoint members-at-large and members representing the medical schools in North Carolina, the medical specialty organizations, including the Academy of General Practice of North Carolina and such other organizations and agencies in the field of medical education as deemed appropriate.

Appointments shall be made initially on a staggered basis: one-third for two years; one-third for four years; and the remainder for five years. At the expiration of any one term a successor shall be appointed for a term of five years. No one shall serve for more than one five year term. When a vacancy occurs, a successor shall be appointed for the remainder of that term.

The Committee shall report its activities and its recommendations to the House of Delegates and, in the interim, to the Executive Council and upon approval shall endeavor to implement its recommendations.

SPEAKER OF THE HOUSE: Dr. Shaffner, is this the same, word by word, change in the By-Law that you read on Sunday?

DR. SHAFFNER: It is.

SPEAKER OF THE HOUSE: The same one? You've not made any amendments?

DR. SHAFFNER: No.

SPEAKER OF THE HOUSE: I was asking that so I might have to explain it because amendments can be made to changes in the By-Laws on the second reading, but this is identically the same thing.

Now, is there any discussion of this? [No response]

It has been apparently moved and seconded by the Committee on Constitution and By-Laws.

All those in favor of the changes as read on the final reading, let it be known by saying "aye"; opposed "no".

[The motion carried unanimously.]

Now, we go back to approval of the resolution including the additional changes in the Constitution and By-Laws.

Any discussion of the resolution? [No response]

Those in favor, let it be known by saying "aye"; opposed "no".

So be it.

DR. HUGHES: The next motion concerns one that was received from the Executive Council.

Mr. Speaker, after study of all available information, including that from several state medical societies who have built their own buildings in recent years, the Building Committee and the Executive Council believe very strongly that provisions should be made to build ultimately a building with four floors. To double the size of the proposed two story building requires that a heavier foundation be put down as a part of the initial construction. It is the opinion of the Chairman of the Finance Committee that funds already committed by the House of Delegates will be sufficient to cover this increased expenditure.

It is, therefore, recommended that the House of Delegates approve expenditure of the additional funds necessary to provide a foundation adequate to support a future two story addition to the proposed headquarters building, provided however, that the total cost of the heavier foundation, the proposed two story building and furnishings shall not exceed the anticipated sum of money to be derived from sources already approved by the House of Delegates.

Mr. Speaker, I move adoption of this motion.

SPEAKER OF THE HOUSE: The motion has been made and duly seconded by your Reference Committee, all of whom are delegates and have a right to make a motion and second it.

Any discussion of this motion?

Yes, sir!

DR. LESTER A. CROWELL, Jr. [Lincoln County]:

Mr. Chairman, as a matter of information, what's the additional cost?

DR. BENTON [Chairman, Finance Committee]: \$125,000.

SPEAKER OF THE HOUSE: Yes, Dr. May!

DR. W. JOSEPH MAY [Forsyth County]: May from Forsyth County!

This is a small point perhaps, but I am instructed to find out before I go back.

SPEAKER OF THE HOUSE: This is Dr. May from Winston-Salem!

DR. MAY: Do I interpret this statement correctly

in that dues will not be increased by enacting this resolution?

DR. HUGHES: That is correct. As a matter of fact, even if we didn't have this resolution, they probably could not be increased without further action of the House of Delegates.

SPEAKER OF THE HOUSE: Couldn't be!

DR. HUGHES: Could not be, yes.

DR. BEDDINGFIELD: Mr. Speaker!

SPEAKER OF THE HOUSE: Yes, Dr. Beddingfield!

DR. BEDDINGFIELD: Beddingfield from Wilson County!

I would like to offer an amendment to this motion. In line five, where it says "provisions should be made to build ultimately a building with four floors" this implies a mandate that we go to four floors and I don't think that was their intent.

I think the intent here was to build a building with the potential for expansion to four floors if and when the Society and this House of Delegates votes to go ahead and make the addition to it.

But I think this could be accomplished by striking the word "ultimately" and inserting after the word "building" the words, "with the potential for expansion to", so that would read:

... the Building Committee and Executive Council believe very strongly that provisions should be made to build a building with the potential for expansion to four floors.

SPEAKER OF THE HOUSE: Do you make that as an amendment?

DR. BEDDINGFIELD: I offer that as an amendment.

SPEAKER OF THE HOUSE: Any second to his amendment?

[The motion was seconded from the floor.]

Any discussion of this amendment?

DR. BENTON: Well, the recommendation is in the second paragraph. What you're amending comes under remarks.

DR. BEDDINGFIELD: Oh, I see, the first paragraph is explanatory remarks.

But it would be an expression of this House and I thought it ought to be clearly on the record.

The real purpose of this thing is that we may want to build to four floors at a future time. If that is the case it would be more economical for us to have the heavier foundation now.

This is simply authorization to allow the Building Committee to go ahead—

SPEAKER OF THE HOUSE: Well, Dr. Beddingfield, I agree with Dr. Benton in reading this whole thing over again.

The second paragraph is the motion. You're making an amendment to the discussion from above. Now, if you want to make your amendment, make it to the second paragraph, not the first paragraph.

It has already been moved and seconded, but the first part is discussion and does not accept an amendment; therefore, I'm going to deny the motion to

amend and second, if it's an amendment to the first paragraph.

DR. BEDDINGFIELD: I'll withdraw the misguided amendment that I offered and offer an amendment to the second paragraph, in the third line, so that it will read:

... to provide a foundation adequate to support a possible addition to the proposed headquarters building.

SPEAKER OF THE HOUSE: "A possible addition to the proposed headquarters building", is that it?

DR. BEDDINGFIELD: Yes.

SPEAKER OF THE HOUSE: Do you accept that?

DR. HUGHES: Yes.

SPEAKER OF THE HOUSE: Is there a second to that amendment?

DR. FRANK W. JONES: I rise to second it.

SPEAKER OF THE HOUSE: All right, any discussion of the amendment, only? [No response]

If not, all those in favor let it be known by saying "aye"; opposed "no".

[The motion carried unanimously.]

Now, discussion back to the original motion as amended.

DR. JOHN L. BROCKMAN [Guilford County]: John Brockman of Guilford!

This is not discussion, but I want clarification.

It says:

... provided, however, that the total cost of the heavier foundation, the proposed two story building and furnishing shall not exceed the sum ...

Suppose we do exceed that sum, where does that leave us? Then what do we do?

DR. HUGHES: The Building Committee will have to come back to the House of Delegates and ask them for more money or change the plans of construction so as to conform to the anticipated income.

DR. BROCKMAN: But, basically, there would be further action before it went any further?

DR. HUGHES: That's right.

That was one of the corrections—"shall" not exceed not "should" not exceed.

SPEAKER OF THE HOUSE: Any further discussion? [No response]

Those in favor of the motion, let it be known by saying "aye"; opposed "no".

So be it.

DR. HUGHES: Mr. Speaker, the next motion combines one that came from the Executive Council and Resolution No. 2 and is therefore a substitute motion.

Reference Committee II recommends that the House of Delegates support the North Carolina Hospital Association Bill to change the Workmen's Compensation Act, including the amendments proposed by the Executive Council.

The proposed Bill (to amend) GS 97-26 would then read as follows:

Section 1: GS 97-26 to be amended by adding a sentence at the end thereof to read as follows:

It is the intent of the Section that any provider of hospital services to an employee eligible for such services pursuant to the provisions of this

chapter shall be entitled to receive from the employer, or his insurance carrier, payment equal to but not more than the amount customarily charged by the provider of such hospital service to paying patients; that payment for physician services by the employer or his insurance carrier shall be on the basis of usual, customary and reasonable rates as defined below; and any rules or regulations or practices of the Industrial Commission which limit the amount of money to be paid to said providers of hospital services below their customary charges to paying patients, or physicians below the usual, customary and reasonable fees, shall be null and void and may be so declared by any court of competent jurisdiction upon petition by said physician or provider of hospital services.

Usual is defined as the "usual" fee which is charged for a given service by an individual physician in his personal practice (i.e., his own usual fee);

Customary is defined as that range of usual fees charged by physicians of similar training and experience for the same service within a given specific limited geographic or socio-economic area;

Reasonable is defined as a fee which meets the above two criteria, or, in the opinion of the responsible local medical association's review committee, is justifiable in the special circumstances of the particular case in question.

Section 2: All laws and clauses of laws in conflict herewith are hereby repealed.

Section 3: This act shall be in full force and effect from and after ratification.

Mr. Speaker, I move adoption of this motion.

SPEAKER OF THE HOUSE: Gentlemen, it has been moved and duly seconded.

Do you understand what you're doing? You're not writing the laws of the State! [Laughter] But, you are empowering the legislative committee of this state to support such a bill with such amendments.

Yes, sir!

DR. ERNEST B. SPANGLER [Guilford County]: Spangler from Guilford:

I wonder if in line eight and nine it might be good to change the word "rates" to "fees" since below it refers to fees rather than rates.

DR. HUGHES: Sure.

SPEAKER OF THE HOUSE: Where is that?

DR. SPANGLER: Lines eight and nine, "... on the basis of usual, customary and reasonable rates", and I'm saying shouldn't this be "fees".

DR. HUGHES: It should be fees, that is correct.

DR. F. JONES: [Catawba County]: Jones, Delegate-at-large!

SPEAKER OF THE HOUSE: Who did you say you were?

DR. F. JONES: Jones, delegate-at-large!

SPEAKER OF THE HOUSE: Thank you.

DR. F. JONES: Mr. Speaker, I wish to make an editorial correction in stating that the proposed bill is not the General Statute 97-26. We are proposing to change

the statute if this is part of the motion so that the proposed General Statute 97-26 would then read, etcetera.

SPEAKER OF THE HOUSE: Thank you.

Is that acceptable? Do you understand it or not?

DR. HUGHES: I don't know whether I accept it or not. I don't understand it. [Laughter]

I think he's right; at least the Chairman of the Legislation Committee says so.

SPEAKER OF THE HOUSE: My parliamentarian has just spoken and from past experience, I'm afraid to deny him! He says that's correct, so if the Chairman of our Reference Committee will accept it, we will correct it to that extent.

Any further discussion, corrections, deletions and what not? [No response]

If not, those in favor let it be known by saying "aye"; opposed "no".

So be it.

DR. HUGHES: Resolution No. 4 with reference to osteopaths.

Resolution: 4

Introduced by: Edgecombe-Nash Medical Society
Subject: Osteopaths

RESOLVED: that, WHEREAS, legislation admitting osteopaths to the unrestricted practice of medicine and surgery in North Carolina would bring about an unprecedented downgrading of the laws which have regulated the practice of medicine and surgery in our state and it is our belief that a change of this kind would be against the best interest of the people of North Carolina, we oppose such legislation and respectfully request our representatives in the General Assembly to do likewise if and when such legislation arises.

Mr. Speaker, in view of recent actions by the Executive Council, Board of Medical Examiners and the State Legislature, Reference Committee II feels that no action is necessary on this resolution.

I, therefore, move that the resolution should be tabled indefinitely.

SPEAKER OF THE HOUSE: There's some question probably in some of your minds whether this is possible or not. The motion has been made and duly seconded, so the Chair will try to explain it to you.

In the sheet that I gave to you, according to Sturgis, although we go by Robert's—Robert's doesn't have anything in it with regard to Reference Committees—according to this, it may make an explanation of the reasons for the Committee's decision before offering its recommendations. It may recommend that a proposal be adopted, rejected, amended or otherwise disposed of. Therefore, the motion to table is in order.

It has been made and seconded. It is not open for discussion.

Those in favor, let it be known by saying "aye"; opposed "no".

So be it.

DR. HUGHES: Resolution No. 5, Solicitation and Commercial Advertising of a Medical Specialty by Lay Corporations in AMA Publications.

Resolution: 5

Introduced by: Cumberland County Medical Society

Subject: Resolution on solicitation and commercial advertising of a medical specialty by law corporations in AMA publications.

WHEREAS, the AMA Board of Trustees voted last fall to open all AMA publications to solicitation and commercial advertising of a medical specialty (pathology) by lay corporations, and

WHEREAS, physicians, by long tradition, are forbidden by activities characterized by self-laudation and solicitation, both of which are essential to commercial advertising, and

WHEREAS, this Trustee policy encourages the practice of medicine by lay corporations, and promotes solicitation, in violation of all codes of medical ethics and

WHEREAS, this Trustee policy, adopted without consulting the House of Delegates, will set a precedent for regional, state, and other medical journals, will spread to other fields of medicine and will lower standards of patient care.

THEREFORE, BE IT RESOLVED by the Cumberland County Medical Society, in ordinary session assembled 8 April 1969, that this Society

- (1) reaffirms medicine's traditional opposition to the practice of medicine by lay corporations, and to solicitation, and to commercial advertising of the practice of medicine, and
- (2) requests its North Carolina Medical Association delegates to oppose this new AMA Trustee policy vigorously at the North Carolina Society of Medicine convention in Pinehurst next May, and
- (3) requests these delegates to call on the North Carolina delegation to AMA to reverse this Trustee policy at the July AMA Convention in New York City.

Mr. Speaker, Reference Committee II recommends that the House of Delegates approve the following amended resolution:

RESOLVED, that the Medical Society of the State of North Carolina (1) reaffirms medicine's traditional opposition to the practice of medicine by lay corporations and to their solicitation and advertising through convention exhibits and in professional journals; (2) request that delegates to the American Medical Association work to reverse this Trustee policy at the July AMA Convention in New York City.

So moved.

SPEAKER OF THE HOUSE: It has been moved and seconded.

Any discussion? [No response]

If not, those in favor let it be known by saying "aye"; opposed "no".

So be it.

DR. HUGHES: Mr. Speaker, this concludes the report of Reference Committee II and I move the acceptance of this report.

[The motion was seconded from the floor.]

SPEAKER OF THE HOUSE: As amended.

All those in favor, let it be known by saying "aye"; opposed "no".

[The motion carried unanimously.]

DR. HUGHES: I wish to thank the two members of the committee and the House of Delegates for your help, discussion and forbearance.

Thank you.

[Applause]

SPEAKER OF THE HOUSE: I don't know how you boys feel about it, but I think our Reference Committees are proving their worth each year and if any body here feels that they have not had a chance to adequately be heard on any of the matters, which have been discussed in these two reports, I think there must be something wrong with him rather than our system.

Now, it gives me a great deal of pleasure to call on Dr. Marvin Lymberis to report on the President's and Officers' Addresses.

Dr. Lymberis!

DR. MARVIN N. LYMBERIS [Chairman, Committee on President's Addresses]: Mr. Speaker, the Committee to review the two addresses of the President have reviewed these speeches.

In the first address, the President outlined the many functions of this Society during his tenure of office, some of its problems, its accomplishments and remaining problems.

In his second address, he outlined the pressing need for our involvement in continuing to support the increase in medical manpower and paramedical services and to support our medical educational institutions.

The Committee recommends that these addresses be accepted and to commend the President on his fine work.

[Applause]

SPEAKER OF THE HOUSE: He didn't make a motion.

Could I have a motion that this report be accepted?

DR. HUGHES: So moved.

SPEAKER OF THE HOUSE: Second?

[The motion was seconded from the floor.]

Any discussion? [No response]

Those in favor, let it be known by saying "aye";

[The motion carried unanimously.]

Now, we come to New Business.

Is there any New Business to come before the floor?

Dr. Benton!

DR. BENTON: Mr. Speaker, if it is in order, I would like to make the request about the finances.

SPEAKER OF THE HOUSE: What is the request, in essence?

DR. BENTON: May I read it?

SPEAKER OF THE HOUSE: Yes, sir.

DR. BENTON: The Finance Committee asks for authority from this House of Delegates to initiate and follow through to completion the action necessary to liquidate the Society's assets in the property on the Raleigh-Durham Highway.

The reasons for this request are as follows:

- 1) The committee anticipates that in the building

of our headquarters facility, these assests will be needed urgently, that if we start now we are likely to get a better deal than to wait until the last moment and be forced to accept any offer.

2) This property was originally bought for one purpose and one purpose only—as a site for our headquarters building.

Now that you have decided on another location it seems to us prudent that for tax reasons and for other reasons, the property be sold at this time.

Be it understood that the President of the Society must sign the final confirmation of the deal, that he will not sign that paper until he has permission from the Council, if time permits, but at any rate from the Executive Committee.

SPEAKER OF THE HOUSE: You have heard his presentation, I want a vote as to whether he should be allowed to make it official business and it can be discussed and finally voted on.

Those in favor of having this heard, let it be known by saying "aye"; those opposed "no".

There are no "noes" so I'll grant him his two-thirds!

Essentially, what he's saying in long terms which is to say that the Finance Committee wants the right to be able to sell or negotiate the sale of that property at the proper price and the proper time.

All right, sir, make your motion!

DR. BENTON: I move that the House of Delegates grant the authority requested by the Finance Committee in order to proceed as outlined above.

SPEAKER OF THE HOUSE: Any discussion of this? [The motion was seconded from the floor.]

It has been moved and seconded. The Finance Committee isn't necessarily a member of the House of Delegates, therefore a second is in order and has just been made.

Now, is there any discussion? [No response]

If not, those in favor let it be known by saying "aye"; opposed "no".

So be it.

I think I saw somebody else over here with some more New Business.

DR. ERNEST W. FURGURSON [Washington County]:

Mr. Speaker, I am Ernest Furgurson from Washington County!

SPEAKER OF THE HOUSE: Yes, sir!

DR. FURGURSON: I request permission of the House to consider an important new special advisory committee of the Medical Society of the State of North Carolina to work with the Physicians Assistant Program at Duke University and other medical centers.

SPEAKER OF THE HOUSE: That's the purpose of this request. He will have a motion to make which he will put in form if it is accepted.

All those in favor of listening to his proposal, let it be known by saying "aye"; opposed "no".

So be it.

All right, sir, go ahead with your proposal.

DR. FURGURSON: Resolution:

WHEREAS, the medical profession is in great

need of additional well trained assistants, and

WHEREAS, the Physicians Assitant's program at Duke University proposes to generate such assistants, and

WHEREAS, the Directors of the program and the Physicians Assistants themselves wish to establish and maintain a close association with the organized structure of medicine in the State through the Medical Society of the State of North Carolina, and be it further,

RESOLVED, that the Medical Society of the State of North Carolina recognizes the program by endorsing its objectives and by appointing an advisory committee to work with this and similar programs in other medical schools. This committee shall be composed of one member from the State Society at large, one member from the State Board of Medical Examiners, and one graduate from such a training program. This committee shall advise the Society with respect to the progress of this and other programs, and recomended further steps as appear advisable in the best interest of the medical profession, the patients and the assistants themselves.

SPEAKER OF THE HOUSE: This is listed as a resolution, but it is a resolution made by an individual; therefore, it will have to have a second.

DR. E. HARVEY ESTES, Jr. [Durham County]: Second.

SPEAKER OF THE HOUSE: Is there any discussion?

PRESIDENT WELTON: Mr. Speaker!

SPEAKER OF THE HOUSE: Dr. Welton!

PRESIDENT WELTON: Mr. Speaker, Members of the House:

I am in favor of this resolution,

I would like to recommend one change and one addition.

Under the Resolved, line five and six calls for one member from the State Society at large. It is my recommendation that this be changed to three members. The Resolved calls for three representatives from the three medical schools. I believe we should have three representatives from the State Society at large.

The second recommendation is in the last sentence of the Resolved which states that:

This committee shall advise the Society—

I understand the physicians assistants at Duke are in the process of forming, or have formed, an Association. It would seem to me to be in order that this committee should also advise their Association as well as us.

So I present the first as a change and the second as an addition.

SPEAKER OF THE HOUSE: I don't quite understand your addition.

The committee shall advise the Medical Society, which has to be in there—

PRESIDENT WELTON: Yes, "society" is in there.

SPEAKER OF THE HOUSE: It says the "society" but it doesn't say the Medical Society.

PRESIDENT WELTON: I believe that's the intent, isn't it, Dr. Furgurson?

SPEAKER OF THE HOUSE: Dr. Furgurson, is that the intent, the "society" means the Medical Society?

DR. FURGURSON: Yes.

SPEAKER OF THE HOUSE: Will you accept that, "Medical Society"—and what else have you got?

PRESIDENT WELTON: And, the Association of Physicians Assistants—is that the correct title, Dr. Estes?

DR. ESTES: American Association of Physicians Assistants.

SPEAKER OF THE HOUSE: Do you make that as an amendment, Dr. Welton?

PRESIDENT WELTON: I do.

SPEAKER OF THE HOUSE: That has been made as an amendment. Is there any second to the amendment?

DR. F. W. JONES: May I make a parliamentary inquiry?

SPEAKER OF THE HOUSE: Yes.

DR. F. W. JONES: Is it true or not true that this body votes on the Resolveds and not the Whereases?

SPEAKER OF THE HOUSE: Absolutely!

DR. F. W. JONES: Then, my inquiry—in the Resolved it does not identify the program.

SPEAKER OF THE HOUSE: Dr. Furgurson, would you like to make any changes in that?

DR. FURGURSON: I would like to ask Dr. Frank Jones to word that appropriately. [Laughter]

SPEAKER OF THE HOUSE: All right, to go back to parliamentary procedure, we have an amendment before the floor. You are making an additional amendment and you can have an amendment to an amendment, to the second degree but not the third degree.

But you're making an additional amendment which I would prefer your doing later, if we pass the first amendment.

Now, the first amendment is before the floor. That is that you change it to three members from the Medical Society at large and add that the committee shall advise the Medical Society and the American Association of Physicians Assistants.

Is there any discussion of that amendment?

[No response]

If not, let it be known by saying "aye": opposed "no".

[The motion carried unanimously.]

Now, your amendment, sir.

DR. F. W. JONES: Mr. Speaker, I move that the amended motion be further amended by the addition in line two to read:

The program of the American Association of Physicians Assistants by endorsing its objectives
—and a further addition—in principle

And, that is the conclusion of the amendment by addition.

So, it will finally read—and somebody will have to give me the first amendment.

RESOLVED, that the Medical Society of the State of North Carolina recognizes the American

Association of Physicians Assistants Program by endorsing its objectives in principle—

and then further with the first amendment.

SPEAKER OF THE HOUSE: All right, is there any second to that amendment?

DR. BAKER: Second.

SPEAKER OF THE HOUSE: All right, it has been moved and seconded.

Is there any discussion of the amendment?

[No response]

If not, those in favor let it be known by saying "aye"; those opposed "no".

[The motion carried unanimously.]

Now, the amended resolution is in order for discussion and Dr. Davis would like to discuss it.

VICE SPEAKER OF THE HOUSE: I also am very much in favor of this, but I think these programs will not be limited to medical schools alone and I would suggest that in line four, the words "in other medical schools" be deleted and provided, ". . . an advisory committee to work with this and similar programs", period.

Mr. Chairman, I move this amendment.

SPEAKER OF THE HOUSE: He's not in the Chair and he has the right to make that motion.

Is there a second to that amendment?

PRESIDENT WELTON: Second.

SPEAKER OF THE HOUSE: It has been seconded.

Any discussion? [No response]

If not, those in favor let it be known by saying "aye"; those opposed "no".

[The motion carried unanimously.]

Any discussion of the amended, amended, amended, amended motion?

SPEAKER OF THE HOUSE: Thank you.

Any further discussion?

DR. MARK M. LINDSEY [Second Vice President of the Society]: Mr. Speaker, I rise to speak—

My name is Lindsey from Richmond County!

I am Second Vice President—

And, the Chairman of the ad hoc Committee on Medical Education.

SPEAKER OF THE HOUSE: Yes, sir.

DR. LINDSEY: I rise to express strong objection to this last hour resolution.

This is a last minute resolution with no previous publicity and it comes in the face of a well thought out investigative program by your ad hoc Committee on Medical Education, who foresaw this program as a part of a greater picture for medical education to be controlled by this Society.

We believe, strongly, this would be a first effort to fragment the work of the Medical Education Committee and, therefore, I object on behalf of the ad hoc Committee to this resolution.

SPEAKER OF THE HOUSE: But you do not make a motion?

DR. LINDSEY: No, sir.

SPEAKER OF THE HOUSE: That is an objection.

Any further discussion?

Dr. Marvin Lymberis!

DR. LYMBERIS: Mr. Speaker, I'll offer a substitute motion.

I make a substitute motion that this matter be referred to an appropriate committee for study and later report to this House of Delegates.

SPEAKER OF THE HOUSE: That is a committee referral. Is there any second to that?

[The motion was seconded from the floor.]

It has been moved and seconded.

Any discussion of the referral, only?

Yes, Dr. Rhodes!

DR. JOHN S. RHODES [Wake County]: John Rhodes of Wake County!

May I offer an amendment to the substitute motion that has just been made?

SPEAKER OF THE HOUSE: That's to the motion to refer.

DR. RHODES: I would amend it that this matter be referred to the new Committee on Medical Education just established by this House of Delegates.

SPEAKER OF THE HOUSE: Is there a second to that amendment?

[The motion was seconded from the floor.]

It has been moved and seconded.

Now, the amendment only is open for discussion.

DR. ESTES: Mr. Speaker, may I be recognized?

SPEAKER OF THE HOUSE: Yes, sir, if you want to discuss the amendment, the second amendment now, not the first one.

DR. ESTES: Estes from Durham!

I'd like to speak in opposition to this amendment. All of us, as physicians, utilize assistants. Some of these are formally trained, some are not.

These men and women are trained in these programs that we're talking about to follow the physician's directions and to do various other things.

Now, the speaker this morning, Dr. Daryl Mase, gave us some wise counsel, I think; that we must assume the leadership in this in order to move forward.

If this Society is not the proper one to advise these groups to proceed and move into the future, then who else is to be responsible and if today is not the day to start this leadership, then when should we start our leadership?

I can see nothing but good can be gained from this and I speak in opposition to this amendment.

SPEAKER OF THE HOUSE: We have a substitute motion to the resolution which is to refer it to an unnamed but proper committee.

Then an amendment to that to refer it to a specific committee. We will now vote, unless there is further discussion, on the amendment to refer it to the specific committee.

All those in favor of the amendment to the substitute motion, let it be known by saying "aye"; opposed "no".

The "ayes" have it.

Now, we are speaking to the substitute motion to refer.

Dr. Beddingfield!

DR. BEDDINGFIELD: Mr. Speaker, Ed Beddingfield from Wilson.

I speak in opposition to the motion to refer.

I speak out of deference to the Committee on Medical Education. President Welton appointed that committee. He and I talked about it a lot and I agreed to continue it and the Council has taken action to strengthen the Committee on Medical Education. We support it and Dr. Lindsey in its endeavors very much.

However, time is passing us by in this area of health manpower.

I would be very reluctant to see this postponed for another year.

I'm afraid in our consideration of the role of the physician's assistant, we must not, we should not confuse the legality, the licensure, the myriad of other questions that come about about the physician's assistant.

This resolution is to one point only, which is to apply our endorsement to a voluntary Association of Physicians Assistants with control and advice from the Medical Society.

There is a vacuum in medical care which is increasing in all facets. This is going to be filled somehow by somebody. It may be filled by people over whom we have no control.

This is our chance.

I would further state that what we do here has national implications. I have been privileged to serve on the advisory committee of the PA program over at Duke. I have written the national organization asking them for guidance as to what my conduct in this should be. They wrote back and said, "We don't have any guidelines. We're looking to North Carolina for guidance in this program".

I think this has national overtones as to what we do here.

SPEAKER OF THE HOUSE: And, you're speaking against the motion to refer?

DR. BEDDINGFIELD: I speak against this and in support of the resolution as it has been amended.

SPEAKER OF THE HOUSE: Any further discussion of the amendment?

Dr. Lenox Baker!

DR. BAKER: Dr. Baker of Durham!

I rise for a point of order here and information from the Chair.

We have an amendment now and I think we have two good sides of the argument and I think both sides are right in what they're trying to say.

As I understand it, the Committee on Medical Education has to come back to this House of Delegates. Would a motion be in order now, instead of them having to report back after due study to this House of Delegates, report to the Council at the earliest possible moment to act on the committee's actions?

SPEAKER OF THE HOUSE: The motion has already been made, Dr. Baker, to refer to the proper committee and I think it could be construed as the Executive Council.

DR. BAKER: Then, later would you not permit the motion after that, not to report to the House but to the Council for action?

SPEAKER OF THE HOUSE: I see what you mean,

but we do have to vote on this first, on the motion to refer.

PRESIDENT WELTON: Mr. Speaker!

SPEAKER OF THE HOUSE: Yes, Dr. Welton!

PRESIDENT WELTON: I would like to ask Dr. Lindsey a question.

I certainly agree with Dr. Beddingfield's expression and our appreciation and esteem for the initial work done under his chairmanship.

I would like to ask Dr. Lindsey—and I would like to apologize we had no time to discuss this in advance, I was occupied with other official duties—is Dr. Lindsey's objection to the first part of this resolution, or is it to the second part naming a new committee?

In case it is to the second part, it would appear to me to be possible for the President to designate the Medical Education Committee to do this.

DR. LINDSEY: I repeat my objections are to the fragmentation of the allied health personnel, one aspect of which I think this would be a beginning.

We hope to write to the incoming President as a recommendation of this committee recommending the immediate appointment of this committee which has already been authorized and that the present committee, with the definite exclusion of its chairman, be reappointed.

The reason I'm so serious in this is because I have made certain recommendations to the permanent committee that I feel, only with my resignation, can go forward.

This committee could begin acting immediately and should be acting immediately and this would be a letter from us to the incoming President recommending that he reappoint the committee for their early activation on all the urgent matters.

SPEAKER OF THE HOUSE: We are still back to the reference of the resolution.

If there's no further discussion of this, we're back to refer it to the proper committee.

Dr. Furgurson!

DR. FURGURSON: Mr. Speaker, we are here for one purpose and that is to maintain the control of the medical profession over paramedical personnel.

I'm sure in Dr. Mase's talk this morning, you recognized the fact that he brought out this was a grave danger.

The only request that these men are making is that you supervise this program in any way that you see fit. If the program is not satisfactory, to close it down. This is your jurisdiction under this advisory committee.

Now, if this matter is not carried forth, we are going to be in a position of "wait and see" and we have too long been in this position.

I certainly have not been a pessimist over the past thirty years, but I predict—I'm not a Drew Pearson either—But I do predict that the medical care in these United States is going to be in the gravest position that this nation has ever known in the next three to five years.

I say that from a rural area where two of our doctors are looking after 30,000 active cases. We have

a lot of paramedical personnel. Perhaps I speak with specific authority, because we have the only graduate physician's assistant outside of the medical center and our experience has been most gratifying.

These men are well trained under a well supervised program at Duke Medical Center.

We want to keep it that way. We want these men to know their limitations as well as their qualifications and even know their limitations better than their qualifications.

They are not allowed to treat. They are not allowed to prescribe. They are not allowed to diagnose and they are not allowed to examine female patients.

This is a mark between a physician and a physician's assistant.

Thank you.

SPEAKER OF THE HOUSE: Thank you, Dr. Furgurson.

DR. SHAFFNER: Mr. Speaker!

SPEAKER OF THE HOUSE: Dr. Shaffner of Winston-Salem!

DR. SHAFFNER: I'd like to ask Dr. Lindsey, I'd like to ask Dr. Furgurson and others who offered the main resolution, if the committee which they are recommending in this Resolved could be the Medical Society members from our Medical Education Committee?

I see Dr. Lindsey's point of view, but to put it in one committee would tie it all together.

I'm not trying to oppose this, I'm just trying to get it all in one place.

SPEAKER OF THE HOUSE: These remarks are really pertinent to the original resolution. They also are obviously in opposition to refer which I think are very pertinent.

DR. SHAFFNER: Yes, that's what I'm trying to get at.

DR. Furgurson: Mr. Speaker, we would be delighted to have the Education Committee head up this program. I think this is where it should be.

SPEAKER OF THE HOUSE: Dr. Lindsey!

DR. LINDSEY: Mr. Speaker, I rise because there are several objections. This was thrust upon us without warning; we are by-passing the philosophy of the Reference Committee where none of this hearing was heard. Our committee was there in number at the sacrifice of their time and effort and none of this was brought up then at that time.

If you recommend to the permanent committee the appointment of an appropriate subcommittee of its members interested in allied health problems and consultants, it might be a valid starting point for the concern of this committee in allied health education.

This subcommittee should attempt, without a policy, to insert itself into education of allied health personnel population. It should attempt to coordinate and to evaluate by working with various groups in allied health fields.

SPEAKER OF THE HOUSE: Thank you, Dr. Lindsey. Any further discussion?

Dr. Lymberis!

DR. LYMBERIS: Mr. Chairman, as the maker of the substitute motion, I would like to make it clear that

there is no opposition whatsoever to the intent of Dr. Furgurson's resolution.

I feel, however, as we have already noted, a resolution made in haste without proper wording, without study of the implications of this wording should not be passed as a policy of this Society.

I approve entirely of the principles which I think Dr. Furgurson stands for. It is not a motion to delay. It is a motion to refer this matter with the intent of approval of this House to an appropriate committee for study and wording.

If we resolve in haste, we will repent at leisure.

We have had this experience before.

I support this activity wholeheartedly, but I believe a committee should spend quite a bit of time on the wording of this resolution.

For instance, you have it stated in your three medical school representatives. Who are they? Are they medical students? Are they administrators? Are they secretaries? Everyone has an idea of what they think it means, but it's not stated.

I only request let's draw up this resolution with thought, with consideration by men who have studied it and then it can be approved by the Executive Council and implemented immediately.

SPEAKER OF THE HOUSE: I think we've discussed it in full, so I'm going to call for the question if there's no objection.

Those in favor of the substitute motion to refer it to the appropriate committee, let it be known by saying "aye", opposed "no".

It is referred.

Dr. Baker, do you have a motion you want to make?

DR. BAKER: Baker from Durham.

I move that this House of Delegates empower the Executive Council to act on the recommendations from the appropriate committee to which this matter is being referred, as soon as worked out and as early as possible implement this program.

DR. ESTES: Second.

SPEAKER OF THE HOUSE: The motion has been made and seconded.

Is there any discussion? [No response]

If not, those in favor let it be known by saying "aye"; those opposed "no".

So be it.

Now, is there any further New Business?

[No response]

Gentlemen, I wonder if you would allow me just a few minutes in my farewell appearance before you.

It has been my very great privilege to be one of those who obviously are the object for some of the new rules and regulations which have been proposed for limited tenure. I have served nine of the past eleven years as your Speaker.

I have served twenty-one of the past twenty-three years as a member of your Executive Council. This has not been done without considerable personal sacrifice, but I can assure you that it has been done

with a great deal of pleasure and, frankly, a great deal of fun.

I've enjoyed it. I've felt that I have been quite privileged to be in the position that I have been with this House, for which I have the utmost respect.

We have a great many dissidents in this House and I speak with authority because I've been one all of my life, but I think we have very few, if any, destructive dissidents. I hope we won't have them in the future.

Let me beg and ask you to have the same patience and tolerance with my successor, who has certainly proved himself today, in the mistakes he will make because he will make them: the same patience and tolerance that you had with me in the many, many mistakes I've made.

May I beg you to always maintain the principle of democratic processes that you always have.

May I ask of you that you always remain loyal to those basic tenets of honesty and integrity which has made this House respected and great.

It's going to give me a great deal of pleasure now to ask our new Speaker if he will adjourn the meeting.

DR. BAKER: Mr. President, may I rise?

No one knows how I hate to do this, thank God!

I'm sorry Amos Johnson isn't here. Somebody referred to your scars and I know you've got a lot of them over the years, but we see you here as a man who's well branded and loved.

I think everybody would want to join with me in a big hand for you.

[Whereupon the entire assemblage then accorded Dr. Koonce a standing ovation.]

VICE SPEAKER OF THE HOUSE: May it be recorded, please, that this House gave the Speaker a standing vote of thanks for his many faithful years of service to this Society.

I now recognize Dr. Welton.

PRESIDENT WELTON: Mr. Speaker, I wish to read to you a telegram received today from Mr. Leslie A. Boney, Jr., of Trinidad, Colorado:

AS A GRATEFUL PATIENT I WISH TO JOIN YOU IN TRIBUTE TO RETIRING SPEAKER OF THE HOUSE DR. DONALD KOONCE. AS A TALENTED SURGEON HE EXEMPLIFIED THE HIGHEST IDEALS OF YOUR NOBLE PROFESSION. BEST WISHES FOR A SUCCESSFUL CONVENTION.

Leslie A. Boney, Jr., Trinidad, Colorado.

[Applause]

VICE SPEAKER OF THE HOUSE: Is there other business to come before the House? [No response]

If not, may I have a motion that we adjourn.

[The motion was severally made and seconded from the floor.]

Those in favor please say "aye";

We stand adjourned.

[The meeting adjourned at four-twenty-seven o'clock]

General Sessions

MONDAY MORNING SESSION

May 19, 1969

The First General Session of the 115th Annual Session of the Medical Society of the State of North Carolina convened at eleven-twenty-five o'clock in the Cardinal Ballroom of The Carolina Hotel, Pinehurst, North Carolina, Dr. John Glasson, First Vice President of the Society, presiding.

CHAIRMAN GLASSON: I would like to call to order the First General Session this morning of the Medical Society of North Carolina.

I'd like to introduce our President, Dr. Welton, who will convene the session.

DR. DAVID G. WELTON [President of the Society]

The First General Session of the 115th Annual Session of the Medical Society of the State of North Carolina is now officially in session.

It is my pleasure to present to you the Reverend C. W. Lowry, Minister of the Village Chapel, Village Green here in Pinehurst, for the invocation.

[Reverend C. W. Lowry, Minister, Village Chapel, Village Green, Pinehurst, N. C., then gave the invocation.]

CHAIRMAN GLASSON: Thank you, Reverend Lowry.

It is our privilege this morning to have a panel of distinguished authorities in the field of the Medical Examiner.

We have three panelists this morning. Each of the three will make a presentation and then Dr. Hudson will lead a panel discussion at which time the panel will be glad to receive questions, after discussion, from those attending the meeting.

Our panelists this morning are Dr. Page Hudson, [Chief Medical Examiner, State of North Carolina; Department of Forensic Pathology, University of North Carolina School of Medicine; and, Moderator of the Panel.]

Our next panelist, Dr. Arthur McBay, Chief Toxicologist of the Medical Examiner System of the State of North Carolina.

Our third panelist, Dr. Thomas Ely of Jonesville, Virginia, speaking on the practicing physician as a county medical examiner.

[The three panelists then each presented a paper which will be submitted to the North Carolina Medical Journal for possible publication.]

[Applause]

CHAIRMAN GLASSON: We're fascinated by your presentations. [And hope that you'll be around to tell us more of your experiences.]

We want to thank all of the members of the panel this morning.

Now, it is my pleasure for one of the highlights of the annual meeting of the Medical Society of the State of North Carolina to present our President, Dr. David G. Welton, esteemed friend, medical statesman, physician.

Dave, we await with keen anticipation your annual message.

[President David G. Welton then presented his annual address to be published in the North Carolina Medical Journal.]

[Whereupon at the conclusion of his address, President Welton was then accorded a standing ovation.]

CHAIRMAN GLASSON: The First General Session is adjourned for lunch.

[The meeting adjourned at one-twenty-five o'clock.]

TUESDAY MORNING SESSION

May 20, 1969

The Second General Session of the 115th Annual Session of the Medical Society of the State of North Carolina convened at eleven-twenty o'clock, Dr. John Glasson, First Vice President of the Society, presiding.

CHAIRMAN GLASSON: I would like to call to order the Second General Session this morning.

We have, as you know, a conflict between the good weather and the indoor activities. We're glad that you're all here this morning.

I'd like to turn the Second Session over now to our President Dr. Welton, who will introduce our speakers this morning.

PRESIDENT WELTON: Thank you, John.

[May we have the doors closed in the rear, please]

We have an unusually distinguished trio of speakers this morning, internationally, nationally, outstanding gentlemen.

The title of the first address is, "The Effectiveness of the Incentive System of Medical Care."

Ladies and gentlemen, it is my very great honor and privilege and pleasure to present to you, Dr. Dwight L. Wilbur, President, American Medical Association.

[Whereupon the entire assemblage then accorded Dr. Dwight L. Wilbur a standing ovation.]

[Dr. Dwight Wilbur then presented an address to be submitted to the North Carolina Medical Journal for publication.]

[Whereupon the entire assemblage then accorded President Wilbur a standing ovation.]

PRESIDENT WELTON: Thank you, very, very much, Dr. Wilbur. We appreciate greatly your coming here and we're happy to know that you and Mrs. Wilbur will be able to stay for the rest of the day.

It is now my pleasure to present our next speaker, Dr. J. Lamar Callaway, Professor and Chairman of the Division of Dermatology, Duke University Medical Center, a post he has held with distinction since 1937.

[Dr. J. Lamar Callaway presented a paper which will be submitted to the North Carolina Medical Journal for publication.]

[APPLAUSE]

PRESIDENT WELTON: Thank you, so much, Dr. Callaway, for this lucid and splendid portrayal of a comprehensive plan and program for dermatology in the United States. I think it's fair to call this a program of leadership. It looks ahead. It's planning ahead. It is both extensive and comprehensive.

It meets one of the very important needs in the field of continuing education. It is going to supply the practicing dermatologist with a practical mechanism by which he can determine his own needs in continuing education.

[We're very grateful to you for coming, Cal.]

Our third speaker was born and raised and educated mostly in the Mid-West, like myself. The exception is that he got his Ph.D. at Columbia University in New York.

He has had wide experience as a teacher and administrator. He has been with the University of Florida since 1950 and is presently Dean of the College of Health Related Professions.

I spoke to you at some length yesterday on the importance of the manpower situation and particularly the importance for the immediate future on the training and use of additional allied health personnel.

So, we are very grateful to have Dr. Darrel J. Mase present today and to speak to us on this important subject.

[Dr. Mase!]

[Applause]

[Dr. Darrel J. Mase, Dean, College of Health Related Professions, J. Hillis Miller Health Center, University of Florida, Gainesville, Florida, then presented a paper which will be submitted to the North Carolina Medical Journal for publication.]

[Applause]

CHAIRMAN GLASSON: Dr. Mase, we thank you for this challenge and for this valuable advice.

I would like, again, to thank Dr. Callaway and our President, Dr. Wilbur, for bringing us these challenging messages this morning.

Before we adjourn, I would like to again call on our President, Dr. Welton, for some announcements.

PRESIDENT WELTON: The second meeting of the House of Delegates will convene this afternoon in this room at two-thirty p.m. There is some very important business to be accomplished. Please resist the temptation of the outdoor environment.

Any other announcements?

CHAIRMAN GLASSON: I understand there is a move now among the medical assistants to establish a symposium on patient patting! [Laughter]

We are now adjourned.

[The meeting adjourned at twelve-fifty o'clock.]

WEDNESDAY MORNING SESSION

May 21, 1969

The Third General Session of the 115th Annual Session of the Medical Society of the State of North Carolina convened at nine-twenty-two o'clock in the Cardinal Ballroom of The Carolina Hotel, North Carolina, Dr. Mark McD. Lindsey, Second Vice President of the Society, presiding.

CHAIRMAN LINDSEY: We are now convening the Third General Session of the 115th Annual Meeting of the Medical Society of the State of North Carolina.

Good morning to all of you.

The first order of business today is the Conjoint Session with the North Carolina Board of Health.

It's my privilege to introduce, to chair this, Dr. Ben Dawsey, DVM, Gastonia.

Dr. Dawsey!

DR. BANJAMIN W. DAWSEY: Thank you, Dr. Lindsey.

It's a privilege and a pleasure, in the absence of our Chairman and our Vice Chairman this morning, for me to have this opportunity to present our Health Director, who needs no introduction. He will give us a report of the general health of our State.

I was talking to Dr. Lindsey and we thought it might be good to schedule a sex movie for the opening session before the Conjoint Session next year! [Laughter]

It is, as I said, a privilege to present our State Health Director, Dr. Jacob Koomen.

[Applause]

DR. JACOB KOOMEN [State Health Director, North Carolina State Board of Health] Dr. Dawsey, Dr. Lindsey, Mr. President and Miss Jones:

This is one of the very best podiums in the State. It gives one lots of room. There's opportunity to move one's feet about. It does give playback of one's voice, so there's a great deal of boom back here. What is it where you are? Am I heard clearly, resoundingly, too loud? We're doing fine!

We've already had a good start in the day's work. The State Board of Health met earlier and conducted a very solid meeting with a good deal of business transacted and we've had some humor here at the platform.

President Welton had to leave for a few minutes and the Chairman of the day, Dr. Lindsey, asked that we might proceed and Dave countered with, "Wherever two or three are gathered, in my name we may proceed!" [Laughter]

And, that, I may say, has helped to carry President Dave through a difficult, trying but very successful year.

It's a pleasure for me to be here. It's only a year ago that we last joined together to talk about what the State Board of Health had done and now, we'll talk about what happened in 1968 in the services with which we worked jointly with you.

There are a considerable number of highlights and each of these, the real high points, we'll try to emphasize and the lesser ones, I'm afraid, will because

there is economy of time to be considered and because there is economy of the printed page to be considered later on when our account is published, we will therefore keep it brief and some perhaps momentous occasion will not receive review here.

Our relationship with the Society is a very long one and our reporting to the Society in May goes back to a legislative act of 1893 and our first report given was given on May 11th of that year, now 76 years ago.

The interrelationships have increased and they're almost certain to an manpower stays short and as the health family perhaps shrinks in size, in some ways at least, relative to the total population.

The State Board of Health itself goes back to 1877. In that year, there was an appropriation of \$100 for its work. Now, of course, that was when \$100 could have bought quite a bit and that has been magnified over the years so that two years later the State Board of Health went to a budget of \$2,000 and \$2,000 was set aside for management of epidemics should they occur, but if you'll recall, in those days epidemics always occurred and you'll recall that even now, epidemics still occur, although not the same ones always.

The policy-making body, originally, was the whole State Medical Society and in 1877, that numbered 150 members from 94 counties and I must say, parenthetically, that we're returning to a day when not every county will be represented by a member of the Medical Society as manpower is short.

Shortly thereafter, this was amended so that nine members were elected; four by the Society and five appointed by the Governor.

The Medical Society representatives now are Dr. Raper, Dr. Hiatt, Dr. Maness and Dr. Steiger, all well known to you. They've served the State and the Society and the agency uncommonly well.

The appointees of the Governor are in four categories determined by law and one appointment-at-large, Mr. Randleman representing the profession of pharmacy; Mr. Lackey who represents the dairymen; Dr. Cline who represents the licensed dentists and Dr. Dawsey behind me, who represents the veterinarians; all professions and walks of life closely related to health.

The appointee-at-large is Dr. Baker a Vice President of our Board.

Our interrelationships have been broad and far-reaching and we've been blessed over the years I've been associated with the State Board of Health with an especially hard-working group.

As for the functions of the State Health Director, they are determined by law, too, and he serves as Secretary of the Board. He doesn't vote. He also is the chief executive responsible for the carrying out of the policies and regulations.

In addition to that, he serves on a variety of other state bodies. In particular, on the Executive Council of the State Medical Society and on the Commission for the Blind, Tuberculosis Sanatorium System and the Medical Care Commission and now, on the Regional Medical Program.

He is appointed by the Board and confirmed by the Governor.

Leaving behind now the historical aspects of how we came to be -- I'm one who finds history exciting. Not all do. There are those who find math exciting and not all do and one can turn to any walk of life and find differences in excitement.

So we've added to our staff this year, a full-time planning officer and a full-time training officer, so that in training we may advance sharply with time. Yesterday it was brought out that by the time an engineer finishes college, half his knowledge is already obsolete and that if he does not work to update his knowledge, constantly, by the time he is six or seven years out of college, he's badly out-of-date.

So, through training, we hope to keep abreast.

Planning is an important part of today's society, perhaps most in the health field and there, too, we have added an individual who will be responsible for this so that we may relate the whole of the State's planning efforts; whether this be in voluntary organizations, whether it be in government or whether it be in professional societies.

We come now to the portion where we review the functions of each division and I'll speak first, being alphabetically first, of the Administrative Services Division, captained by able Ben Eaton, who not only had had a long and deep experience in administration, but who has a professional degree in law; an enormous asset to us for what he does administratively and for what he does as a lawyer because no day goes by where several questions involving the State Board of Health and the law arise.

His is a service division so, whenever change is made in something whatsoever, whether this be money, personnel, mail or film, it impinges upon it.

He tells us that the State Board of Health now has 519 employees and that the local health departments have 1,693. This brings us to 2,200 public health employees, total for the State; that is those who are employed in the official agencies, but many if not all who practice in the health profession are related to the public health family.

I have some problem remembering the names of all the 2,200 but I forgive myself when I remember the township which I was brought up in had two villages and which extended six miles on each side had but 2,400 people and even when I was younger and it was easier to remember, I never did know all of my town folk.

I'll say something about our money.

We started with \$100 and now the public health expenditure in North Carolina, state and local, is a little more than \$25 million and probably will be more in the next biennium because there are many things to be done and the State Legislative is very supportive of the things we're trying to do, probably because they hear voices from us, voices from the citizens and voices from you.

We sponsor a weekly radio program called, "Your Health Today." One of our mandates is to educate the public.

We also operate a film library which receives great publicity. We mailed more than 55,000 films last year. 58 per cent of the circulation goes to the public schools, but some 40 non-profit and governmental agencies utilize these resources.

A surprising amount of the material is sued by North Carolina churches.

Likewise we have a public health library, modern and up-dated. I've spoken before about our relationships with the law and our frequent and necessary contact with the Attorney-General and, here, too, because of constant change in health legislation, state and federal, this is a necessary, important and interesting facet of our work.

Following that, I come now alphabetically to the Community Health Division and this is captained by Ronald Levine, who came here assigned by public health service, but like so many assigned by public health service, soon appreciated the merits of the state and stayed.

His background is epidemiology but his real flare is for the local scene. He appreciated, as you do, that our small communities if they have physicians, the physicians tend to be few in number and that's our experience in the public health field, too, so that we're short. We have many posts vacant.

In an effort to meet this need, we have counselled with local boards of health around the possibilities of employing trained, experienced health administrators with appropriate physician backup, and a number of counties have now departed to this system.

Meantime, we're working hard to try to group our counties together so that one physician, where there's the possibility of employing a physician, may serve to guide a health director in many counties.

Another such district was established this year bringing them to 21.

I list also one of the benefits of government in modern day. Ninety-five of our counties now have retirement systems, but there are five still to go.

We've had a considerable amount of reorganization and I must say, as an individual, I look at reorganization for what it will accomplish and I'm not a disturber of bricks and lines, boxes and lines, if you will, for the mere sake of changes, but we look very carefully at change because change involves people and people involve work. Therefore, I'm rather slow to make administrative changes in organization when this might be done only to conform to practices in other states.

But we organized a physical therapy section and you heard an earlier discussion and resolution on how the field is changing, so that there are two classes of individuals who assist the physical therapists. Indeed, there's legislation before our General Assembly about this, so we, too, contribute to this and the Community Health Division is the site for the physical therapy activity.

Nutrition, you've heard so much about this year, not that you're all nutrition conscious but because of the peculiar thrust and news appeal of things going on in this country, in the world abroad, the explosion of population elsewhere and here, the attention on food supply with maldistribution over the face of the earth -- this, of course, has had public healthers on the world scene much concerned over a long period of time, but concern abroad has been brought home.

Our Governor differed from some others when there was news focused about hunger and said, "Let's

look at this!" rather than saying it's not true or it is true, but he asked us to look at it and he asked us, particularly the team headed by Charles Dunn, now Director of SBI, and Miss Jukes, our principal nutritionist, that a group get together out of the Governor's Office to look into this and some 800 families were surveyed: Those who received food from the food stamp program and those who received donated commodities.

It was found indeed that these people are ill-prepared, often, to be helped under such circumstances. Fewer than two per cent of the families had had any formal teaching on food buying, its preparation or the value of food to health and some rather interesting things turned up.

The programs weren't as well utilized as one might have thought. We found, too, that despite the common belief that frequently these people may arrive by automobile, we found them arriving at such depots in a variety of vehicles; none, I must say, very good vehicles and when we looked at the data and inquired after how people came and how they left, we found this anomaly, that fewer left by car than had come.

We wondered how this was possible and the survey showed the reason that fewer left by car than came was this, many came in very old cars and oftentimes the last chug and the last gasp was the one that brought the client for food to the food depot and that he came by car but left walking.

The possession of very good vehicles is not a facet, we found, of those who use food stamp programs.

I come now to the Sanitary Engineering Division under Mr. Jarrett's direction, a native of North Carolina, well educated, deep in this field and he's represented today by Mr. Stevenson because Mr. Jarrett must be elsewhere.

After every legislative session, there's a good deal of legislation that impinges on sanitation and the work of our local sanitarians, boards of health and the Division of Sanitary Engineering.

And, you say, "why is this?"

Well, it's because as the world is not yet by any means Utopian, as far as cleanliness is concerned, and while spitting on the streets has been greatly diminished, those items we find more difficult to control, such as pollution of things about us, are turned to regularly by legislative bodies.

Last year, I believe I sang to you the last two lines from Tom Lair's song entitled, "Pollution, Pollution," which go like this:

The breakfast garbage they throw out in Troy,
They drink at lunch in Perth Amboy!

Similarly, for those on the West Coast, the version is:

The breakfast garbage they throw into the Bay,
They drink at lunch at San Jose!

And, that's the sort of world we live in. We are improving but, nevertheless, we have much to go in the whole of our society. North Carolina, of course, has been long cognizant of this problem because we are a coastal state in the southeast where the climate is relatively warm.

One of the reasons why the State Board of Health was among the earliest formed in this country and one of the reasons for the development of its strength in sanitary engineering, epidemiology, the laboratory sciences and all of those other items which relate to cleanliness and the disclosure first in the control of communicable diseases.

We've worked on jail regulations for prisons. We've worked on agriculture; on such things as the pasteurization of crabmeat. We even worked on such things as urging and helping bridge tenders about the state to make sure that combustion type products are installed.

One of the most, I think, significant activities was the increasing attention towards radiation and we have now come to a modern system of data processing to record the presence of x-ray facilities and the use of isotopes in the state.

We have a strong supportive committee for this purpose.

I'd like to say something about the matter of solid waste disposal. Generally speaking, about a ton of solid waste is discarded per individual in this state and you don't have to drive far, even in a town as beautiful as Pinehurst, to see some recently discarded.

The legislative suggestion that perhaps that there be a price placed upon empty soft drink bottles and empty cans to insure roadside cleanliness was one interesting to people in the public health field.

And, as recently as last night, a member of the Huntly-Brinkley team pointed out that in the United States we use 536 pounds of paper per individual per year.

At any rate, to try to cover this up and to try to control it, we have 56 sanitary landfills and 422 open dumps which coast about \$19 million per year.

Similarly, with our community water supply, they service great cities, smaller communities, mobileparks, subdivisions and the like, but the watching over of 1,700 water supplies, some large and some small, is a vast task, both to do it from an engineering standpoint and to do the monthly specimens which are submitted by law in North Carolina.

Complicated, obviously, was our picture last summer in those communities that were borderline in their water supply, even on a good day; some as you know ran dry and had to tap in elsewhere and this produced not only anxiety in us but all related to it.

I must say a word, too, about the Personal Health Division, under Dr. Scurletis's able leadership who was trained in pediatrics, with a wide experience in clinical practice, schooled in the use of his talents in the state. He heads the division which relates more directly perhaps to those who are ill, or the prevention of illness in some cases, than some of our others do.

There, for instance, is the chronic disease program.

There, for instance, is the home health services program, hopefully one which will be seen in all counties; those who can be cared for outside of institutions, can have such care provided in a less expensive way and in a home setting.

Since I once had some sort of experience with this, I look at this with considerable warmth.

A number of you will know that as a child I had an extensive hospitalization as a result of having osteomyelitis twice. One of these drained briefly but one drained for months and months and months and in modern times, should that occur, obviously, home care is the answer and I must say that were it not for the cleverness of my mother, I would have been there much longer, but she was taught to sterilize using home devices and taught how to change dressings.

The Chronic Disease Section has been working with Duke University, University of North Carolina, to develop a kidney program for the state.

The health insurance benefits which has changed its orientation, still certifies institutions, but we really, I think, have begun to put more energy into helping utilization review committees. There are now certified in our state 153 hospitals, 47 extended care facilities, 12 independent laboratories and 18 home health agencies.

As for nursing homes, the number increases steadily and so does the number of beds. There are 70 nursing homes licensed in the state, 34 combination rest homes making about 5,813 nursing beds and 1,639 resident beds, for those in combination.

These are 104 all together in 46 counties, but along with many other health facilities and health professions, they are not evenly distributed over the state.

All right, we've also been busy in training administrators for these.

As you know, last year, we reported on a metabolic screening program and there, some more than 90 per cent of the newborns in North Carolina are now screened and six PKU patients have been identified. We believe if our data are correct that the identification of such an individual saves the taxpayer and family somewhere between \$100,000 and \$125,000.

The number increased over the year previously.

I must say something too about genetic counselling, a part of the mental retardation program, which is done at the University of North Carolina. Our Family Planning Clinics have seen more service the past year, as have the private physicians, so perhaps we are due for change.

It would seem now looking at the national data that our birth rate may be slightly increasing. As you know, it has fallen for a long time, ten years perhaps.

In Epidemiology, a whole new set of rules and regulations were processed and passed by our board. They're modern and up-to-date.

It's hard to do so in the field of epidemiology because there is constant change either in infectious agents or man's response to them.

We distributed 75,000 doses of measles vaccine and we were part of the study done in Wake County on the rubella vaccine.

As mentioned earlier, the days of the epidemiologist and epidemics are not done. The Hong Kong influenza strain paid a devastating visit to the State and this was followed some time later by a visit of the "B" strain influenza.

We traced our epidemiological pattern and watched, of course, what happened to the pattern of pneumonia and our own experience in this suggests that North Carolina has performed admirably in the influenza field, often discovering small outbreaks when other states do not get reports.

In the field of venereal disease control, for the fourth year in succession, the number of syphilis cases fell, but gonorrhea cases increase. We have no belief that we have all of the data in hand in that field.

We, of course, pick up through our formal channels a tremendous amount of statistical data. We have on record something like seven million birth certificates, death certificates, marriages and divorces, and your name, certainly would appear among the birth certificates; marriage as well.

So, that we have a large staff working on statistical processing.

The field of occupational health, I think, has received a good deal of attention nationally. It is said that few states have good occupational health codes.

Joint work between the Governor's Occupational Health Council, the State Board of Health, the Institute of Government and other state agencies, have put together proposed legislation which has just been introduced and has already heard some testimony.

We've been busy, too, with some of the members in the audience who will be talking about an exciting program later today in the field of traffic safety, one of the great and, I think, essentially uncontrolled killers in the United States.

You heard our President mention the projected numbers for 1975 and that perhaps 100,000 or more will be killed in that year; more than 60,000 already and we, of course, are around the 2,000 level, but I urge you to pay heed to what those speakers who follow me will have to say.

I move on to our Laboratory Division.

We house a number of the commonly biologically active antitoxins, vaccines and so on, and we house some rare ones as well. In particular, we are the depository for coral snake anti-venom and we have two life saving doses for the state should these be needed.

I might branch off a little bit.

I was walking through the Washington zoo one day and there was a heated discussion between, I think, two levels of management; that day, the Washington zoo had apparently just obtained four levels of anti-venom for one of their particularly poisonous snakes and the younger member of this team said, "It isn't enough!" I believe they had five snakes and the older man was trying to reason with him and what the chances really were of five people being bitten simultaneously by the five snakes.

He reasoned, as I would, that sufficient antitoxin was stored.

But, one sometimes finds that in those states where there is considerable snake industry, snake gardens and so on, that there are not protective antitoxins or anti-venom available that we are able to supply.

We do test both for marriage blood for syphilis serology, but laboratory services require that we test water supply of all the known suppliers once a month. We process in the neighborhood of 900,000 specimens per year all together.

Further than that, we supply training actively to our own staff. In addition to that, obviously, to those who come to visit us out of the schools and colleges, and the local technical institutes.

I must say there, going back briefly, that in epidemiology, we have Dr. Hiatt who's a native of North Carolina. He has been trained in the country's very best institutions and brings a world of epidemiological material to this division.

Epidemiology can be applied from communicable diseases to all human behavior.

I should say too a word about Dr. Maddry who's long in the service of the state. His experience in public health laboratories would equal and perhaps exceed that of any laboratory director now serving the state or the United States. His technical depth is enormous and each day, out of his memory, or competence, some problem is solved that some of us who have arrived more recently would have difficulty in bringing to solution.

All right, let's go on.

I come now to the Dental Health Division.

The Dental Health Division, that is those who have responsibility for looking after the teeth of North Carolina's children. There aren't of course enough dentists to see all of the children at any one time. There just aren't enough dentists to do that at any time in the schools or any other place.

So, Maximum effort is concentrated on preventive medicine. Some treatment is given, some extractions are done and last year, among the indigent, 20,000 children received preventive and corrective treatment and, in addition to that, nearly 30,000 were referred to family dentists.

Fluoridation, we think, is the answer in community water supply and about 75 per cent of those who drink community water supplies receive fluoridated water.

Four new communities were added last year.

But many do not receive community water supply. Some schools have their own and we have been working in several of our divisions to bring fluoridation to them when they wish to embark upon such a program.

Further than that, there are a variety of supplemental techniques which are being used in the state and we are doing long-term studies in each of these fields.

Last year, for the first time, we were able to use, with the permission of all involved, senior dental students in summer programs to bring a new focus on dental health in the North Carolina health scene.

That Division is captained by Dr. Alex Pearson who is prominent both in the State Society, admired over the whole of the United States and recent President of the Conference on Dental Health Directors and in introducing each of these individuals to you, I point to their stature with great pride for those who serve you.

I would like to say a word, and just a closing word, about the Committee on Postmortem Medico-Legal Examinations.

It served us in the early part of the year before the new legislation took over and there, in Dr. Kenneth Brinkhous's hands and in Dr. Wagner's hands who served as toxicologist, those counties who remained under the system were helped to bring medico-legal opinion to where it was needed.

As you heard, in Monday's fine program, we now have embarked on a true medico-legal examination system which eventually will be statewide. In Virginia, it took about four years to implement such a system and it probably will here, too.

We didn't know when we hired Dr. Page Hudson and when we found difficulty in finding knowledgeable candidates that there were at that point only 133 certified forensic pathologists in the country, so we feel fortunate to have attracted one out of this very small pool of manpower to have attracted such a good man besides.

He, then in turn, was able to attract Arthur McBay, then at Boston, and just now of North Carolina, who both have spoke and showed slides earlier in the program.

A number of you are already working in the medical examiner system. We need your help badly. We feel a great contribution can be brought by the practitioner.

Dr. Hudson said that 34 counties are presently involved.

It's time to summarize, but it's tough to do it because you're such a warm audience and I look forward from last year's time to this when again I was received with attentiveness.

I've given a brief synopsis of what we do, the highlights of the year past. We don't ordinarily consider such matters as the day-to-day activities.

Some of you have worked with the State Board of Health and many of you, of course, serve on many county health boards, as members or as staff, so we don't review these, but some day we might talk about our basic programs.

Often though, these days, we've come to highly specialized products, different from those we have learned in our professional schools because of changing times, changing finances or sometimes shortage of manpower.

We try to blend the preventive, curative and the rehabilitative services together into a smoothly working system.

We wish to keep the close relationship we have enjoyed in the past, one out of an outgrowth beginning in 1877, one brought about by the wishes of the Medical Society.

Of our staff, I've brought you the names of those who head divisions. There are many others who are here who I should like to name, but it is time that I turned the podium back to the Chairman.

I would like to say, however, that no week goes by but either the officers of your Society and I, one or more, do not physically meet on some ground of discussion and several times each week members of our staff are in consultation with the officers of your

association.

We meet in places such as this, the universities and sometimes in Washington, on common missions.

This brings me great joy personally because the members of the Society, its officers and those elected by you, provide valuable counsel to us all.

We, of course, welcome your support and I must say it is warmly given to us.

It is now time, since I've had the joy of talking about what we do, to return the podium to the day's Chairman.

Thank you, very much. [Applause]

CHAIRMAN LINDSEY: Thank you, Dr. Koomen and Dr. Dawsey, for this fine presentation. It's worth underlining what you said about the warm relationship between this Medical Society and your Board.

Dr. Lester Crowell tells me there have been no papers presented this year which would apply for the Moore County, Wake County and Gaston County awards, as listed on your program.

Next, it's my privilege to call on a man whom as Commissioner I came to admire and respect through his work on the Committee on AMA-ERF.

Dr. William Fleming, Chapel Hill, will you come forward?

DR. WILLIAM FLEMING: I'm here this morning to give the AMA-ERF checks to representatives of the three North Carolina medical schools.

Perhaps before doing so, I might give you a few words about the work of the committee.

We met last September, reviewed in some detail recommendations that we have made to the National AMA-ERF -- recommendations that we thought would have the effect of strengthening the program of soliciting physician contributions to medical education as well as to some of the other activities involved in AMA-ERF.

In the late fall, we sent out a lot of letters to members of the State Society urging contributions to AMA-ERF. We also sent out in the late fall letters to North Carolina physicians who were graduates of out-of-state medical schools urging them to contribute through the AMA-ERF to North Carolina medical schools and the national group reported to us later that almost \$2,000 was contributed as a result of those letters -- that is contributed through AMA-ERF.

We were also pleased to note that while studies in the past few years had indicated that North Carolina physicians contribute perhaps more directly to medical schools in proportion to AMA-ERF contributions than do physicians in the country as a whole, there was a substantial increase in contributions of North Carolina physicians and the Women's Auxiliary to AMA-ERF in 1968 and this year, more than \$14,500 was contributed which was some \$85,500 more than was contributed in the previous year.

So with that brief word, I would like to give these checks that have been received from National AMA-ERF to the three medical schools.

I'm not sure whether Dean Taylor is here or not for the University of North Carolina.

Fine, Dr. Johnson will receive the check for the University of North Carolina which amounts to \$6,227.56.

[Whereupon Dr. Johnson then accepted the check.]

The next one is for Bowman-Gray Medical School and this check is in the amount of \$7,560.25.

DR. LOUIS SHAFFNER: Dean Meads asked me to pick it up.

DR. FLEMING: Very fine, thank you.

[Whereupon Dr. Shaffner then accepted the check.]

And, finally, we have the contribution for the Duke University School of Medicine in the amount of \$6,976.74. I believe Dr. DeMaria will receive this for Dean Anlyan.

[Whereupon Dr. William DeMaria then accepted the check.]

One of the reasons why the State Board of Health was among the earliest formed in this country and one of the reasons for the development of its strength in sanitary engineering, epidemiology, the laboratory sciences and all of those other items which relate to cleanliness and the disclosure first in the control of communicable diseases.

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Complicated, obviously, was our picture last summer in those communities that were borderline in their water supply, even on a good day; some as you know ran dry and had to tap in elsewhere and this produced not only anxiety in us but all related to it.

PRESIDENT WELTON: It is now my great pleasure to come to the Fifty Year Club of the Medical Society of the State of North Carolina.

By authority of the Executive Council and the House of Delegates of the Medical Society of the State of North Carolina, I hereby recognize the Fifty Year Club composed of those members who have attained that distinction by a fifty year period of active practice in medical service during their lifetime.

It will be the purpose of this State Society to so recognize each of these members on the occasion of the annual meeting and to give due recognition to the surviving members of this Club.

[Dr. Welton then recognized the new members of the Fifty Year Club and presented pins.]

CHAIRMAN LINDSEY: Thank you, President Dave, for the rewards of a good and fruitful life.

Let's have a coffee break and reconvene at ten-fifteen sharply.

[There followed a fifteen minute recess.]

It is with a great deal of personal pleasure that I introduce the Moderator for this panel Dr. James F. Newsome.

DR. JAMES F. NEWSOME [Department of Surgery, University of North Carolina School of Surgery, Chapel Hill, N. C.] Dr. Lindsey, with that introduction, I'm even more distressed there aren't any more people here. I would have liked them to have heard it.

We're indeed grateful, not only to you, Dr. Lindsey, but to the members and officials of the State Society for giving us the opportunity to discuss what has concerned many of us for many, many years.

What Dr. Koomen mentioned a moment ago, is probably one of our greatest epidemiologic problems and certainly our greatest killer of all and that is the automobile and the relative lack of concern that has been demonstrated over this problem throughout the years.

It is our intent this morning to briefly review first, the extent of the problem and, secondly, what's being done about it and, thirdly, some of the things that some of us at least feel must be done and should be done in order to cope with this problem more effectively.

Now, while I say that many people have not been concerned, there are a few people who have a great deal of concern and who have spent tremendous time in this whole subject and if we accomplish nothing else this morning, I would like you to know some of these people and some of the things that they have done and some of the accomplishments that have come about as a result of their efforts.

The first part of our program has to do with the definition of the problem and I know of no one who is more capable of doing this than Dr. Jesse Meredith who is Chairman of the Trauma Committee of the American College of Surgeons, North Carolina

Chapter, and who has spent a tremendous amount of time over the past years in this entire area.

It's with a great deal of pleasure then that I introduce Dr. Jesse Meredith, Department of Surgery at the Bowman-Gray School of Medicine in Winston-Salem.

[Dr. Jeredith then presented a paper which will be submitted to the North Carolina Medical Journal for publication.]

[Applause]

MODERATOR: Thank you, very much, Dr. Meredith.

Some of the efforts to meet some of these problems have been going on for a long time, among which has been the establishment of the driver licensing program and this is a program which many, many physicians throughout the state have participated in, almost anonymously, and I think earlier, without any compensation.

The value of this kind of program has been inestimable and some of the comments made later will imply the value of this program.

But, one of the people who has been involved in it considerably and who has a great feeling for the need for this, has been our next speaker, Dr. Charles B. Wilkerson, Jr., of Raleigh.

[Dr. Wilkerson then presented a paper which will be submitted to the North Carolina Medical Journal for publication.]

[Applause]

MODERATOR: Thank you, so much, Charlie.

It's this type of interest, concern and participation that I was mentioning earlier. I'm delighted that you mentioned Dr. John Morris because he asked me to express his regrets that he could not be here today and I think John is the one individual in the state, if you could possibly single out one person, who has done so much and has been so much the instigator in getting this program developed.

Unfortunately, his wife was admitted to the hospital just recently and he couldn't make it.

Another area where a great deal of effort and activity and, indeed, results have been accomplished in this entire program has been the ambulance attendant training program.

Dr. George Johnson of the Department of Surgery at the University of North Carolina, Chapel Hill, has been probably one of the leading figures in getting this program started and we're fortunate to have Dr. Johnson discuss that problem with us this morning.

[Dr. George Johnson then presented a paper which will be submitted to the North Carolina Medical Journal for publication.]

[Applause]

MODERATOR: Thank you, very much, Dr. Johnson.

One of the areas that has been of concern to a number of people, both in the medical profession as well as in the governmental agencies involved in licensing people, has been the attempt to gain appropriate information so that we would have certain data on which to formulate a program, and probably to look for appropriate legislation.

In an attempt to solve this problem, there has

recently been developed the North Carolina Driver Evaluation Research and Education Center, which has been under the direction of Dr. William DeMaria of Duke Medical Center in Durham.

We're delighted to have Dr. DeMaria to discuss this with us today.

[Dr. William DeMaria, North Carolina Driver Evaluation, Research and Education Center, Duke Medical Center, Durham, N. C., presented a paper which will be submitted to the North Carolina Medical Journal for publication.]

[Applause]

[The Moderator then summed up the three papers.]

[Applause]

CHAIRMAN LINDSEY: Dr. Newsome, the Society is indebted to you and to your committee for bringing this wonderful program here today.

Dr. Meredith, Dr. Wilkerson, Dr. Johnson and Dr. DeMaria, again, I thank you for participating in this very vital program.

We hope this isn't the end of where you present this program, that you'll present it through other media throughout the state, to other doctors not here today.

Thank you, Dr. Newsome.

To say that a man needs no introduction, is a compliment. It means that everybody knows him, knows what he does, knows what he can do and is respectful of him.

So, it's my privilege to introduce to you a warm personality, a good friend, a born leader, a doctor who stands out among his peers, and a natural for the position as President of the Medical Society of the State of North Carolina, Dr. Edgar Theodore Beddingfield, Jr.

[Whereupon the entire assemblage then accorded President Beddingfield a standing ovation.]

PRESIDENT BEDDINGFIELD: Thank you, very much, Mr. Vice President, for those generous remarks.

I have entitled my remarks, which will be a little more lengthy than those last night -- I hope not too long so we can get on with the interesting part of the program -- "Medicine in North Carolina 1969: A Conspectus."

[Dr. Beddingfield then presented an address which is to be published in the North Carolina Medical Journal.]

[Whereupon the entire assemblage then accorded President Beddingfield a standing ovation.]

I must tell you, having received this, this is not the latest Dow Jones report and it's not hot legislative news--

[Whereupon President Beddingfield proceeded to unwrap a very long telegram.]

This is something that touches me very much. It is a telegram from a group of citizens of Stantonsburg and Wilson of congratulations.

[Applause]

CHAIRMAN LINDSEY: As has happened with increasing repetition in this Society, one great man follows another one; his predecessor, Dr. David Welton.

PAST PRESIDENT WELTON: It is now my very pleasant duty to administer the Oath of Office to the other new officers and I would ask them please to come forward and stand in front of the platform here.

Dr. Louis Shaffner, the new President-elect;

Dr. Robert Crouch, the new Vice President;

We understand he is not present.

Dr. Rose Pulley, Second Vice President;

Dr. James E. Davis, Speaker of the House;

Dr. Chalmers Carr, the new Vice Speaker of the House.

[Whereupon the new officers present assembled in front of the podium.]

We have three out of five. For Wednesday noon, that's pretty good!

Now, I shall read the Oath of Office and I shall indicate to you three at the proper time when to respond and I'll tell you how to respond -- [laughter] -- and the answer is "I do!"

[Whereupon the new officers then stood facing the audience while Dr. Welton recited the Oath of office.]

I SOLEMNLY SWEAR THAT I WILL
CARRY OUT THE DUTIES OF MY OFFICE

TO THE BEST OF MY ABILITY: I SHALL UPHOLD THE CONSTITUTION OF THE UNITED STATES OF AMERICA AND THE CONSTITUTION AND BY-LAWS OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA AT ALL TIMES. I SHALL CHAMPION THE CAUSE OF FREEDOM IN MEDICAL PRACTICE AND FREEDOM FOR ALL MY FELLOW AMERICANS.

What say you?

[Whereupon the new officers present then responded with, "I do."]

It's very loud and clear!

I officially now declare you installed in your particular specific offices, Dr. Louis Shaffner as President-elect; Dr. Rose Pulley as Second Vice President; Dr. Chalmers Carr as Vice Speaker.

Thank you. [Applause]

CHAIRMAN LINDSEY: Are there any announcements at this time? [No response]

Is there any further business to come before this third general session? [No response]

We will recess now until twelve-twenty-five exactly!

[The meeting adjourned at twelve-five o'clock.]

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HISTORICAL DATA

H-1

EARLY HISTORY OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA FROM ORGANIZATION TO 1804

Date	Place	President	Vice Presidents	Corresponding Secretary	Secretary	Recording Secretary	Treasurer	Censors
Dec. 17, 1799, or April 16, 1800	Raleigh	Richard Fenner	Nathaniel Lonnis John Claiborne	Calvin Jones		Wm. B. Hill	Cargill Massenburg	Sterling Wheaton James Webb Jas. John Pasteur Jason Haad
Dec. 1, 1800	Raleigh	Richard Fenner			Sterling Wheaton			
Dec. 1, 1801	Raleigh	John C. Osborne	Thomas Mitchell Richard Fenner	Calvin Jones	Sterling Wheaton		Cargill Massenburg	James Webb John Sibley
1802	Raleigh	John C. Osborne		Calvin Jones				
1803	Raleigh	John C. Osborne		Calvin Jones				
1804	Raleigh	John C. Osborne		Calvin Jones				

HISTORY OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA FROM 1849 TO 1969

*Missing Data Not to be Found in Record

Date	Place of Meeting	Number in Attendance	President	Vice Presidents*	Secretary	Treasurer*	Members on Roll*	Honorary Members*	Honorary Fellows*
1849	Raleigh	25	F. J. Hill		W. H. McKee		25		
1 1850	Raleigh	21	E. Strudwick	F. J. Haywood, C. E. Johnson, J. E. Williamson, W. G. Thomas	W. H. McKee	W. G. Hill	38	9	
2 1851	Raleigh	23	E. Strudwick	C. E. Johnson	W. H. McKee	W. G. Hill	46	0	
3 1852	Wilmington	38	J. E. Williamson	Thomas N. Cameron, William G. Hill, Johnston B. Jones, N. J. Pittman	E. B. Haywood	J. J. W. Tucker	72	12	
4 1853	Fayetteville	24	J. E. Williamson	William G. Hill, Johnston B. Jones, J. B. G. Myers, N. J. Pittman	W. W. Harris	Daniel Dupree	80	14	
5 1854	Raleigh	37	J. H. Dickson	N. J. Pittman, J. B. G. Myers, J. Graham Tull, A. D. McLean	S. S. Satchwell	Daniel Dupree	84	17	
6 1855	Salisbury	23	J. H. Dickson	J. Graham Tull, Owen Hadley, A. D. McLean, Hugh Kelly	S. S. Satchwell	J. B. Dunn	96	18	
7 1856	Raleigh	35	C. E. Johnson	Marcellus Whitehead, F. R. Gibson, Johnston B. Jones, O. F. Manson	S. S. Satchwell	J. B. Dunn	101	22	
8 1857	Edenton	25	C. E. Johnson	Marcellus Whitehead, O. F. Manson, H. W. Faison, E. T. Gibson	W. G. Thomas	J. B. Dunn	113	16	
9 1858	New Bern	69	W. H. McKee	Edward Warren, C. W. Graham, Caleb Winslow, A. B. Pierce	W. G. Thomas	J. B. Dunn	172	18	
10 1859	Statesville	81	W. H. McKee	James G. Ramsey, P. E. Hines, J. R. Mercer, W. T. Howard	W. G. Thomas	C. W. Graham			
11 1860	Washington	64	N. J. Pittman	P. T. Henry, R. H. Winborne, M. Whitehead, T. S. Leach	W. G. Thomas	C. W. Graham	233	18	
12 1861	Morganton	23	N. J. Pittman	J. J. Summerell, C. T. Murphy, G. W. Hodges, W. A. B. Norcom	W. G. Thomas	C. W. Graham	244	18	
13 1866	Raleigh	20	J. J. Summerell	E. Burke Haywood, R. H. Winborne, W. L. Barrow, J. W. Jones	W. G. Thomas	C. W. Graham			
14 1867	Tarboro	41	W. G. Thomas		S. S. Satchwell	C. W. Graham	288	11	
15 1868	Warrenton	27	S. S. Satchwell	Hugh Kelly, George A. Foote, Charles J. O'Hagan, J. H. Baker	Thomas F. Wood	J. W. Jones			
16 1869	Salisbury	36	E. B. Haywood	Thomas E. Wilson, A. B. Pierce, C. T. Murphy, M. A. Locke	Thomas F. Wood	J. W. Jones			
17 1870	Wilmington	38	C. J. O'Hagan	E. A. Anderson, F. N. Luckey, W. R. Sharpe, R. L. Payne	Thomas F. Wood	J. W. Jones			
18 1871	Raleigh	35	Hugh Kelly	D. N. Patterson, R. C. Pearson, J. B. Seavy, G. L. Kirby	Thomas F. Wood	J. W. Jones			
19 1872	New Bern	34	W. G. Hill	H. W. Faison, R. I. Hicks, C. H. Macon, W. A. B. Norcom	James McKee	J. W. Jones			
20 1873	Statesville	43	M. Whitehead	W. T. Ennett, William Little, Charles Duffy, P. T. Jerman	James McKee	H. T. Bahnsen			
21 1874	Charlotte	56	W. A. B. Norcom	J. B. Jones, R. F. Lewis, C. G. Cox, J. L. Knight	James McKee	H. T. Bahnsen			
22 1875	Wilson	60	J. W. Jones	Walker Debnam, J. A. Gibson, William Little, D. N. Patterson	James McKee	H. T. Bahnsen	148	5	
23 1876	Fayetteville	33	Peter E. Hines	J. H. Baker, G. G. Smith, T. D. Haigh, J. K. Hall	James McKee	H. T. Bahnsen	157	4	
24 1877	Salem	42	George A. Foote	J. K. Hall, B. W. Robinson, A. Holmes, A. A. Hill	James McKee	A. G. Carr	177	4	
25 1878	Goldboro	79	R. L. Payne	E. M. Rountree, Richard Anderson, S. B. Flowers, L. A. Stith	I. J. Picot	A. G. Carr	194	6	
26 1879	Greensboro	109	Chas. Duffy, Jr.	J. A. Gibson, Willis Alston, James McKee, A. A. Hill	L. J. Picot	A. G. Carr	198	6	
27 1880	Wilmington	105	J. F. Shafer	J. K. Hall, W. C. McDuffie, W. R. Wilson, R. F. Lewis	L. J. Picot	A. G. Carr	225	6	
28 1881	Asheville	92	R. B. Haywood	J. E. McKee, W. H. Lilly, R. H. Speight, W. J. H. Bellamy	L. J. Picot	A. G. Carr	254	6	
29 1882	Concord	65	Thos. F. Wood	T. J. Moore, D. J. Cain, S. E. Evans, John McDonald	L. J. Picot	A. G. Carr	297	7	
30 1883	Tarboro	112	J. K. Hall	A. W. Knox, J. M. Hadley, E. S. Foster, John Whitehead	L. J. Picot	A. G. Carr	310	7	
31 1884	Raleigh	112	A. B. Pierce	F. W. Potter, G. W. Graham, R. Dillard, G. W. Long	L. J. Picot	A. G. Carr	348	7	
32 1885	Durham	173	W. C. McDuffie	James McKee, T. E. Anderson, W. H. Whitehead, A. G. Carr	W. C. Murphy	R. L. Payne, Jr.	424	6	

HISTORY OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA FROM 1849 TO 1969—Continued

*Missing Data Not to be Found in Record

Date	Place of Meeting	Number in Attendance	President	Vice Presidents	Secretary	Treasurer	Members on Roll July 15	Honorary Members	Honorary Fellows*
33 1886	New Bern.....	113	Joseph Graham.....	H. T. Bahnsen, L. J. Picot, J. L. McMillan, W. W. Faison.....	J. M. Baker.....	R. L. Payne, Jr.....	438	7	.....
34 1887	Charlotte.....	112	H. T. Bahnsen.....	G. G. Smith, J. L. Nicholson, C. M. Van Poole, H. B. Ferguson.....	J. M. Baker.....	R. L. Payne, Jr.....	452	7	.....
35 1888	Fayetteville.....	133	T. D. Haigh.....	W. T. Ennett, J. A. Dunn, T. E. Anderson.....	J. M. Baker.....	C. M. Van Poole.....	306	6	.....
36 1889	Elizabeth City.....	50	W. T. Ennett.....	W. J. Jones, S. W. Stevenson, G. W. Long.....	J. M. Baker.....	C. M. Van Poole.....	410	6	.....
37 1890	Oxford.....	160	G. G. Thomas.....	R. L. Payne, Jr., Richard Dillard, S. D. Booth.....	J. M. Hays.....	C. M. Van Poole.....	414	6	.....
38 1891	Asheville.....	135	R. H. Lewis.....	S. W. Battle, J. L. Nicholson, W. H. Lilly.....	J. M. Hays.....	C. M. Van Poole.....	422	6	.....
39 1892	Wilmington.....	162	W. T. Cheatham.....	T. S. Burbank, J. W. Long, W. H. H. Cobb, W. D. Hildard.....	J. M. Hays.....	C. M. Van Poole.....	431	6	.....
40 1893	Raleigh.....	221	J. W. McNeill.....	W. C. Galloway, H. H. Harris, J. M. Hadley, Thomas Hill.....	R. D. Jewett.....	M. P. Perry.....	447	5	3
41 1894	Greensboro.....	166	W. H. H. Cobb.....	J. A. Hodges, R. W. Tate, Willis Alston, M. H. Fletcher.....	R. D. Jewett.....	M. P. Perry.....	454	5	3
42 1895	Goldsboro.....	.....	J. H. Tucker.....	J. Howell Way, W. H. Harrell, O. McMullan, C. A. Misenheimer.....	R. D. Jewett.....	M. P. Perry.....	436	7	3
43 1896	Winston-Salem.....	158	R. L. Payne.....	S. D. Booth, J. P. Munroe, I. A. Burroughs, J. E. Grimsley.....	R. D. Jewett.....	M. P. Perry.....	452	7	3
44 1897	Morehead City.....	103	P. L. Murphy.....	J. C. Walton, A. A. Kent, M. R. Adams, B. L. Long.....	R. D. Jewett.....	M. P. Perry.....	406	6	3
45 1898	Charlotte.....	* ..	Francis Duffy.....	E. C. Register, A. T. Cotton, J. H. B. Knight, F. H. Russell.....	R. D. Jewett.....	M. P. Perry.....	437	6	21
46 1899	Asheville.....	152	L. J. Picot.....	I. W. Faison, J. W. White, H. H. Dodson, W. C. Brownson.....	Geo. W. Presley.....	G. T. Sikes.....	480	6	16
47 1900	Tarboro.....	115	George W. Long.....	C. M. Van Poole, James M. Parrott, T. B. Williams, W. D. Hildard.....	Geo. W. Presley.....	G. T. Sikes.....	482	6	21
48 1901	Durham.....	186	Julian M. Baker.....	M. H. Fletcher, C. A. Julian, D. A. Stanton, E. M. Summerell.....	Geo. W. Presley.....	G. T. Sikes.....	515	5	18
49 1902	Wilmington.....	147	Robert S. Young.....	A. G. Carr, E. D. Dixon-Carroll, I. M. Taylor, J. M. Parrott.....	Geo. W. Presley.....	G. T. Sikes.....	546	5	20
50 1903	Hot Springs.....	155	A. W. Knox.....	E. G. Moore, C. A. Julian, W. W. McKenzie, J. L. Nicholson.....	J. Howell Way.....	G. T. Sikes.....	530	6	19
51 1904	Raleigh.....	326	H. B. Weaver.....	John Hey Williams, John C. Rodman, S. F. Pfuhl.....	J. Howell Way.....	G. T. Sikes.....	1,033	8	17
52 1905	Greensboro.....	361	David T. Tayloe.....	C. A. Julian, John T. Burris, I. W. Faison.....	J. Howell Way.....	G. T. Sikes.....	1,175	8	17
53 1906	Charlotte.....	406	E. C. Register.....	L. B. McBrayer, W. H. Cobb, Jr., W. O. Spencer.....	J. Howell Way.....	G. T. Sikes.....	1,234	8	16
54 1907	Morehead City.....	217	Samuel D. Booth.....	C. M. Strong, J. E. McLaughlin, W. F. Hargrave.....	David A. Stanton.....	H. McK. Tucker.....	888	7	16
55 1908	Winston-Salem.....	372	J. Howell Way.....	J. E. Stokes, J. A. Turner, W. H. Dixon.....	David A. Stanton.....	H. McK. Tucker.....	998	7	28
56 1909	Asheville.....	337	J. F. Highsmith.....	C. M. Van Poole, D. A. Garrison, D. O. Dees.....	David A. Stanton.....	H. McK. Tucker.....	1,067	7	26
57 1910	Wrightsville Beach.....	276	J. A. Burroughs, E. J. Wood.....	E. J. Wood, John Q. Myers, L. D. Wharton.....	David A. Stanton.....	H. D. Walker.....	1,050	8	35
58 1911	Charlotte.....	412	C. M. Van Poole.....	J. V. McGougan, W. E. Warren, L. N. Glenn.....	David A. Stanton.....	H. D. Walker.....	880	8	45
59 1912	Hendersonville.....	296	A. A. Kent.....	J. P. Munroe, W. P. Horton, J. G. Murphy.....	David A. Stanton.....	H. D. Walker.....	950	8	44
60 1913	Morehead City.....	232	J. P. Munroe.....	F. R. Harris, E. S. Bullock, L. B. Morse.....	John A. Ferrell.....	H. D. Walker.....	1,133	8	40
61 1914	Raleigh.....	431	J. M. Parrott.....	E. T. Dickinson, J. T. J. Battle, D. E. Sevier.....	John A. Ferrell.....	H. D. Walker.....	1,228	8	47
62 1915	Greensboro.....	443	L. B. McBrayer.....	J. J. Phillips, C. W. Moseley, S. M. Crowell.....	John A. Ferrell.....	H. D. Walker.....	1,221	9	68
63 1916	Durham.....	406	M. H. Fletcher.....	J. L. Nicholson, L. N. Glenn, W. H. Hardison.....	Benj. K. Hays.....	W. M. Jones.....	1,228	10	79
64 1917	Asheville.....	280	Charles O'H. Laughinghouse.....	D. J. Hill, J. L. Spruill, J. H. Shuford.....	Benj. K. Hays.....	W. M. Jones.....	1,271	11	81
65 1918	Pinehurst.....	291	I. W. Faison.....	Wm. deB. MacNider, Jos B. Greene, Ben F. Royal.....	Benj. K. Hays.....	W. M. Jones.....	1,087	11	81
66 1919	Pinehurst.....	335	Cyrus Thompson.....	J. W. Halford, T. W. Davis, A. McN Blair.....	Sec.-Treas. Benj. K. Hays.....	Acting Sec.-Treas. L. B. McBrayer.....	1,306	11	100
67 1920	Charlotte.....	470	C. V. Reynolds.....	H. D. Walker, F. Stanley Whitaker, Thos. I. Fox.....	Benj. K. Hays.....	L. B. McBrayer.....	1,497	12	100
68 1921	Pinehurst.....	404	T. E. Anderson.....	C. S. Lawrence, W. H. Ward, J. M. Manning.....	Benj. K. Hays.....	L. B. McBrayer.....	1,491	12	93
69 1922	Winston-Salem.....	507	H. A. Royester.....	W. T. Parrott, B. C. Nalle, J. R. McCracken.....	.....	Sec.-Treas. L. B. McBrayer.....	1,571	12	100
70 1923	Asheville.....	356	J. W. Long.....	F. M. Hanes, T. C. Johnson, B. L. Long.....	.....	L. B. McBrayer.....	1,592	9	101
71 1924	Raleigh.....	525	J. V. McGougan.....	J. L. Spruill, Eugene B. Glenn, D. A. Garrison.....	.....	L. B. McBrayer.....	1,604	9	106
72 1925	Pinehurst.....	550	Albert Anderson.....	W. L. Dunn, A. E. Bell, K. G. Averitt.....	.....	L. B. McBrayer.....	1,657	10	116
73 1926	Wrightsville Beach.....	445	Wm. deB. MacNider.....	J. P. Matheson, W. W. Dawson, H. H. Bass.....	.....	L. B. McBrayer.....	1,663	10	107
74 1927	Durham.....	653	John Q. Myers.....	J. W. Carroll, A. Y. Linville, C. H. Cocke.....	.....	L. B. McBrayer.....	1,691	10	121
76 1928	Pinehurst.....	611	John T. Burris.....	G. H. Macco, R. F. Leinbach, W. R. Griffin.....	.....	L. B. McBrayer.....	1,738	11	143
76 1929	Greensboro.....	671	Thurman D. Kitchin.....	W. L. Dunn, I. Asheville, D. T. Tayloe, Jr., Washington, W. D. James, Hamlet.....	.....	L. B. McBrayer.....	1,666	11	146
77 1930	Pinehurst.....	701	L. A. Crowell.....	W. B. Murphy, Wm. E. Warren, N. B. Adams.....	.....	L. B. McBrayer.....	1,711	11	155

*Died in 1921

HISTORY OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA FROM 1849 TO 1969—Continued

Date	Place of Meeting	Number in Attendance	President	President-Elect	Vice Presidents	Sec.-Treas.	Members on Roll July 15	Honorary Members	Life Members
78 1931	Durham	714	J. G. Murphy	M. L. Stevens	C. A. Julian J. W. Davis	L. B. McBrayer	1,600	10	164
79 1932	Winston-Salem	740	M. L. Stevens	Jno. B. Wright	C. W. Banner W. W. Sawyer	L. B. McBrayer	1,559	10	166
80 1933	Raleigh	714	Jno. B. Wright	I. H. Mannings	J. R. McCracken	L. B. McBrayer	1,363	10	181
81 1934	Pinehurst	728	I. H. Manning	P. P. McCain	W. G. Suiter R. L. Felts	L. B. McBrayer	1,563	10	210
82 1935	Pinehurst	706	P. P. McCain	Paul H. Ringer	H. D. Walker J. F. McKay William Allan	L. B. McBrayer	1,619	10	215
83 1936	Asheville	683	Paul H. Ringer	C. F. Strosnider	J. K. Pepper E. S. Bullock	L. B. McBrayer	1,462	10	235
84 1937	Winston-Salem	767	C. F. Strosnider	Wingate M. Johnson	C. A. Woodard Jno. F. Brownsberger	L. B. McBrayer	1,503	7	263
85 1938	Pinehurst	802	Wingate M. Johnson	J. Buren Sidbury	R. B. McKnight J. F. Abel	T. W. M. Long	1,715	7	284
86 1939	Cruise to Bermuda	319	J. Buren Sidbury	William Allan	C. B. Williams M. D. Hill	T. W. M. Long	1,605	8	313
87 1940	Pinehurst	835	William Allan	Hubert B. Haywood	F. Webb Griffith Frank C. Smith	T. W. M. Long	1,661	7	311
88 1941	Pinehurst	766	Hubert B. Haywood	F. Webb Griffith	D. W. Holt T. C. Kerns	T. W. M. Long (1) I. H. Manning	1,700	7	309
89 1942	Charlotte	710	F. Webb Griffith	Donnel B. Cobb	Thos. DeL. Sparrow T. L. Carter	Roscoe D. McMillan	1,837	8	360
90 1943	Raleigh	736	Donnell B. Cobb	James W. Vernon	George S. Coleman Julian Moore	Roscoe D. McMillan	1,919	8	361
91 1944	Pinehurst	760	James W. Vernon	Paul F. Whitaker	Fred C. Hubbard George L. Carrington	Roscoe D. McMillan	1,982	8	363
1945	No meeting because of O.D.T. restrictions		Paul F. Whitaker	Oren Moore	Wm. H. Smith Zack D. Owens	Roscoe D. McMillan	1,811	7	383
92 1946	Pinehurst	889	Oren Moore		Wm. H. Smith† Zack D. Owens	Roscoe D. McMillan	1,939	6	397
93 1947	Virginia Beach, Va.	444	Wm M. Coppridge	Frank A. Sharpe	G. E. Bell J. B. Bullitt	Roscoe D. McMillan	2,191	7	404
94 1948	Pinehurst	920	Frank A. Sharpe (2)	James F. Robertson	V. K. Hart J. G. Raby	Roscoe D. McMillan	2,298	8	407
95 1949	Pinehurst	998	James F. Robertson	G. Westbrook Murphy	Joseph J. Combs Joseph A. Elliott	Roscoe D. McMillan	2,318	6	405
96 1950	Pinehurst	947	G. Westbrook Murphy	Roscoe D. McMillan	Ben F. Royal Joseph A. Elliott	Millard D. Hill	2,283	5	455
97 1951	Pinehurst	938	Roscoe D. McMillan	Frederic C. Hubbard	Joseph A. Elliot Henderson Irwin	Millard D. Hill	2,341	5	469
98 1952	Pinehurst	969	Frederic C. Hubbard	J. Street Brewer	Forest M. Houser Arthur Daughtridge	Millard D. Hill	2,326	5	476
99 1953	Pinehurst	1016	J. Street Brewer	Joseph A. Elliott	George W. Paschal John R. Bender	Millard D. Hill	2,673	5	486
100 1954	Pinehurst	1077	Joseph A. Elliott	Zack D. Owens	John F. Foster Julian A. Moore	Millard D. Hill	2,801	6	486
101 1956	Pinehurst	991	Zack D. Owens	J. P. Rousseau	George W. Paschal, Jr. Elias S. Faison	Millard D. Hill	2,896	6	507
102 1956	Pinehurst	1022	James P. Rousseau	Donald B. Koonce	E. W. Schoenheit Milton S. Clark	Millard D. Hill	3,058	7	561
103 1957	Asheville	867	Donald B. Koonce	Edward W. Schoenheit	John S. Rhodes O. Norris Smith	Millard D. Hill	3,127	8	522
104 1958	Asheville	781	Edw. W. Schoenheit	Lenox D. Baker	George W. Holmes Amos N. Johnson	Millard D. Hill	3,171	9	542
105 1959	Asheville	651	Lenox D. Baker	John C. Reece	Amos N. Johnson Kenneth B. Geddie	John S. Rhodes	3,211	10	251
106 1960	Raleigh	848	John C. Reece	Amos N. Johnson	Charles M. Norfleet, Jr. W. Walton Kitchen	John S. Rhodes	3,247	12	472
107 1961	Asheville	636	Amos N. Johnson	Claude B. Squires	Theodore S. Raiford Charles T. Wilkinson	John S. Rhodes	3,248	12	438
108 1962	Raleigh	746	Claude B. Squires	John R. Kernodle	John A. Payne, III J. Sam Holbrook	John S. Rhodes	3,339	9	425
109 1963	Asheville	714	John R. Kernodle	John S. Rhodes	H. Fleming Fuller Jacob H. Shuford	Charles W. Styron	3,491	9	431
110 1964	Greensboro	677	John S. Rhodes	T. S. Raiford	Wm. F. Hollister F. G. Patterson	Charles W. Styron	3,473	8	398
111 1965	Charlotte	738	T. S. Raiford	George W. Paschal, Jr.	Hubert McN. Potat Wayne J. Benton	Charles W. Styron	3,616	8	390
112 1966	Asheville	545	George W. Paschal, Jr.	Frank W. Jones	W. Otis Duck John L. McCain	Charles W. Styron	3,597	12	339
113 1967	Pinehurst	644	Frank W. Jones	Robert A. Ross	David G. Welton Daniel A. McLaurin	Charles W. Styron	3,606	14	302
114 1968	Pinehurst	623	Robert A. Ross	David G. Welton	E. T. Beddingfield, Jr. James S. Raper	Charles W. Styron	3,642	13	298
115 1969	Pinehurst	577	David G. Welton	Edgar T. Beddingfield, Jr.	John Glasson Mark McD. Lindsey	Charles W. Styron	3,674	13	298

†Died during his term of office; succeeded by E. J. Wood, first vice president ‡Died during term of office
 (2) Died during term of office; succeeded by I. H. Manning. (2) Died during term of office; succeeded by James F. Robertson, president-elect.

FROM ORGANIZATION IN 1877 TO 1966

Name	Address	Appointed by	Term
S. S. Satchwell, M.D., President	Rocky Point	State Society	1877 to 1878
Thomas F. Wood, M.D., Secretary	Wilmington	State Society	1877 to 1878
Joseph Graham, M.D.	Charlotte	State Society	1877 to 1878
Charles Duffy, Jr., M.D.	New Bern	State Society	1877 to 1878
Peter E. Hines, M.D.	Raleigh	State Society	1877 to 1878
George A. Foote, M.D.	Warrenton	State Society	1877 to 1878
S. S. Satchwell, M.D., President	Rocky Point	State Society	1878 to 1884
Thomas F. Wood, M.D., Secretary	Wilmington	State Society	1878 to 1884
Charles J. O'Hagan, M.D., President	Greenville	State Society	1878 to 1882
George A. Foote, M.D.	Warrenton	State Society	1878 to 1882
Marcellus Whitehead, M.D.	Salisbury	State Society	1878 to 1880
R. L. Payne, M.D.	Lexington	State Society	1878 to 1880
H. G. Woodfin, M.D.	Franklin	Gov. Z. B. Vance	1878 to 1880
A. R. Ledoux, Chemist	Chapel Hill	Gov. Z. B. Vance	1878 to 1880
William Cain, Civil Engineer	Charlotte	Gov. Z. B. Vance	1878 to 1880
R. L. Payne, M.D.	Lexington	State Society	1881 to 1887
M. Whitehead, M.D., President	Salisbury	State Society	1881 to 1884
S. H. Lyle, M.D.	Franklin	Gov. T. J. Jarvis	1881 to 1883
William Cain, Civil Engineer	Charlotte	Gov. T. J. Jarvis	1881 to 1883
W. G. Simmons, Chemist	Wake Forest	Gov. T. J. Jarvis	1881 to 1883
J. W. Jones, M.D., President	Wake Forest	State Society	1883 to 1889
John McDonald, M.D.	Washington	State Society	1883 to 1889
S. H. Lyle, M.D.	Franklin	Gov. T. J. Jarvis	1883 to 1885
W. G. Simmons, Chemist	Wake Forest	Gov. T. J. Jarvis	1883 to 1885
Arthur Winslow, Civil Engineer	Raleigh	Gov. T. J. Jarvis	1884 to 1886
R. H. Lewis, M.D.	Raleigh	State Board of Health	1884 to 1886
Thomas F. Wood, M.D., Secretary	Wilmington	State Society	1885 to 1887
William D. Hilliard, M.D.	Asheville	State Society	1885 to 1891
Arthur Winslow, Civil Engineer	Raleigh	Gov. A. M. Scales	1885 to 1891
W. G. Simmons, Chemist	Wake Forest	Gov. A. M. Scales	1885 to 1887
J. H. Tucker, M.D.	Henderson	Gov. A. M. Scales	1885 to 1887
R. H. Lewis, M.D., Secretary	Raleigh	State Society	1887 to 1888
H. T. Bahnson, M.D., President	Winston	State Society	1887 to 1888
Arthur Winslow, Civil Engineer	Raleigh	Gov. A. M. Scales	1887 to 1889
W. G. Simmons, Chemist	Wake Forest	Gov. A. M. Scales	1887 to 1889
J. H. Tucker, M.D.	Henderson	Gov. A. M. Scales	1888 to 1891
J. L. Ludlow, Civil Engineer	Winston	Gov. A. M. Scales	1888 to 1891
J. H. Tucker, M.D.	Henderson	Gov. D. G. Fowle	1888 to 1891
F. P. Venable, Ph.D. Chemist	Chapel Hill	Gov. D. G. Fowle	1889 to 1893
J. L. Ludlow, Civil Engineer	Winston	Gov. D. G. Fowle	1889 to 1892
J. A. Hodges, M.D.	Fayetteville	State Society	1889 to 1893
J. M. Baker, M.D.	Tarboro	State Society	1891 to 1893
J. H. Tucker, M.D.	Henderson	Gov. T. M. Holt	1891 to 1893
F. P. Venable, Ph.D., Chemist	Chapel Hill	Gov. T. M. Holt	1891 to 1892
J. L. Ludlow, Civil Engineer	Winston	Gov. T. M. Holt	1892 to 1897
Thomas F. Wood, M.D., Secretary†	Wilmington	State Society	1891 to 1895
George G. Thomas, M.D., President	Wilmington	State Board of Health	1892 to 1895
S. Westray Battle, M.D.	Asheville	State Society	1893 to 1895
W. H. Harrell, M.D.	Williamston	State Society	1893 to 1895
John Whitehead, M.D.	Salisbury	State Board of Health	1893 to 1895
W. H. G. Lucas	White Hall	Gov. Elias Carr	1893 to 1895
F. P. Venable, Ph.D., Chemist	Chapel Hill	Gov. Elias Carr	1893 to 1895
John C. Chase, Civil Engineer	Wilmington	Gov. Elias Carr	1894 to 1897
R. H. Lewis, M.D., Secretary	Raleigh	Gov. Elias Carr	1895 to 1897
W. P. Beall, M.D.	Greensboro	Gov. Elias Carr	1895 to 1897
W. J. Lumsden, M.D.	Elizabeth City	Gov. Elias Carr	1895 to 1897
John Whitehead, M.D.	Salisbury	State Society	1895 to 1897
W. H. Harrell, M.D.	Williamston	State Society	1895 to 1897
W. P. Beall, M.D.	Greensboro	Gov. Elias Carr	1895 to 1897
R. H. Lewis, M.D., Secretary	Raleigh	Gov. Elias Carr	1897 to 1899
F. P. Venable, Ph.D., Chemist	Chapel Hill	Gov. Elias Carr	1897 to 1899
John C. Chase, Civil Engineer	Wilmington	Gov. Elias Carr	1897 to 1899
Charles J. O'Hagan, M.D.	Greenville	Gov. D. L. Russell	1897 to 1899
John D. Spicer, M.D.	Goldsboro	Gov. D. L. Russell	1897 to 1899
J. L. Nicholson, M.D.	Richlands	Gov. D. L. Russell	1899 to 1901
R. H. Lewis, M.D., Secretary	Raleigh	Gov. D. L. Russell	1899 to 1901
A. W. Shaffer, Civil Engineer	Raleigh	Gov. D. L. Russell	1899 to 1901
Charles J. O'Hagan, M.D.	Greenville	Gov. D. L. Russell	1899 to 1901
J. L. Nicholson, M.D.	Richlands	Gov. D. L. Russell	1899 to 1901
Albert Anderson, M.D.	Wilson	Gov. D. L. Russell	1899 to 1901
George G. Thomas, M.D., President	Wilmington	State Society	1899 to 1901

† Died in 1892, leaving a five-year unexpired term, which was filled by the Board

HISTORICAL DATA

H-5

Name	Address	Appointed by	Term
S. Westray Battle, M.D.	Asheville	State Society	1899 to 1901
H. W. Lewis, M.D.	Jackson	State Society	1899 to 1901
H. H. Dodson, M.D.	Milton	State Society	1901 to 1907
R. H. Lewis, M.D., Secretary	Raleigh	Gov. C. B. Aycock	1901 to 1907
W. P. Ivey, M.D.	Lenoir	Gov. C. B. Aycock	1901 to 1907
George G. Thomas, M.D., President	Wilmington	Gov. C. B. Aycock	1901 to 1905
Francis Duffy, M.D.	New Bern	Gov. C. B. Aycock	1901 to 1905
J. L. Ludlow, Civil Engineer	Winston	Gov. C. B. Aycock	1901 to 1905
S. Westray Battle, M.D.	Asheville	State Society	1901 to 1907
H. W. Lewis, M.D.	Jackson	State Society	1901 to 1907
W. H. Whitehead, M.D.	Rocky Mount	State Society	1901 to 1905
J. L. Nicholson, M.D.	Richlands	State Society	1901 to 1905
J. L. Ludlow, Civil Engineer	Winston	Gov. C. B. Aycock	1903 to 1909
J. Howell Way, M.D.	Waynesville	Gov. R. B. Glenn	1905 to 1911
W. O. Spencer, M.D.	Winston	Gov. R. B. Glenn	1905 to 1911
George G. Thomas, M.D., President	Wilmington	State Society	1905 to 1911
Thomas E. Anderson, M.D.	Statesville	State Society	1907 to 1913
R. H. Lewis, M.D.	Raleigh	Gov. R. B. Glenn	1907 to 1913
E. C. Register, M.D.	Charlotte	Gov. R. B. Glenn	1907 to 1909
David T. Tayloe, M.D.	Washington	State Society	1907 to 1913
James A. Burroughs, M.D. ¹	Asheville	State Society	1909 to 1913
J. E. Ashcraft, M.D.	Monroe	State Board of Health	1909 to 1913
J. L. Ludlow, Civil Engineer	Winston-Salem	Gov. W. W. Kitchin	1911 to 1917
J. Howell Way, M.D., President	Waynesville	Gov. W. W. Kitchin	1911 to 1917
W. O. Spencer, M.D.	Winston-Salem	Gov. W. W. Kitchin	1911 to 1917
Thomas E. Anderson, M.D.	Statesville	State Society	1911 to 1917
Charles O'H. Laughinghouse, M.D.	Greenville	State Society	1913 to 1919
R. H. Lewis, M.D.	Raleigh	Gov. Locke Craig	1913 to 1919
Edw. J. Wood, M.D.	Wilmington	Gov. Locke Craig	1913 to 1915
A. A. Kent, M.D. ²	Lenoir	State Society	1913 to 1919
Cyrus Thompson, M.D.	Jacksonville	State Society	1913 to 1919
Fletcher R. Harris, M.D.	Henderson	State Board of Health	1915 to 1921
J. L. Ludlow, Civil Engineer	Winston-Salem	Gov. Locke Craig	1917 to 1923
J. Howell Way, M.D., President	Waynesville	Gov. T. W. Bickett	1917 to 1923
E. C. Register, M.D. ¹	Charlotte	Gov. T. W. Bickett	1917 to 1923
Thomas E. Anderson, M.D.	Statesville	State Society	1917 to 1923
Charles O'H. Laughinghouse, M.D.	Greenville	State Society	1919 to 1923
Fletcher R. Harris, M.D. ³	Henderson	State Society	1919 to 1923
A. J. Crowell, M.D.	Charlotte	Gov. T. W. Bickett	1921 to 1923
Chas. E. Waddell, C. E. ⁴	Asheville	Gov. C. Morrison	1919 to 1925
Cyrus Thompson, M.D.	Jacksonville	State Society	1919 to 1925
R. H. Lewis, M.D.	Raleigh	Gov. T. W. Bickett	1923 to 1925
E. J. Tucker, D.D.S.	Roxboro	Gov. T. W. Bickett	1923 to 1929
J. Howell Way, M.D., President	Waynesville	Gov. C. Morrison	1923 to 1929
A. J. Crowell, M.D.	Charlotte	Gov. C. Morrison	1923 to 1927
James P. Stowe, Ph.G.	Charlotte	Gov. C. Morrison	1923 to 1925
D. A. Stanton, M.D.	High Point	State Board of Health	1923 to 1929
Thomas E. Anderson, M.D.	Statesville	State Society	1923 to 1926
Charles O'H. Laughinghouse, M.D. ⁵	Greenville	State Society	1925 to 1931
Cyrus Thompson, M.D. ¹	Jacksonville	State Society	1925 to 1931
D. A. Stanton, M.D.	High Point	State Society	1925 to 1931
R. H. Lewis, M.D. ¹	Raleigh	Gov. A. W. McLean	1926 to 1931
Jno. B. Wright, M.D. ⁶	Raleigh	Gov. A. W. McLean	1925 to 1931
E. J. Tucker, D.D.S. ⁶	Roxboro	Gov. A. W. McLean	1926 to 1927
W. S. Rankin, M.D. ⁴	Charlotte	State Board of Health	1927 to 1929
L. E. McDaniel, M.D.	Jackson	State Board of Health	1927 to 1929
Chas. C. Orr, M.D.	Asheville	Gov. A. W. McLean	1929 to 1935
Thomas E. Anderson, M.D. ⁶	Statesville	State Society	1929 to 1935
L. E. McDaniel, M.D. ⁶	Jackson	State Society	1927 to 1933
James P. Stowe, Ph.G. ⁶	Charlotte	Gov. A. W. McLean	1929 to 1935
A. J. Crowell, M.D. ⁶	Charlotte	Gov. O. Max Gardner	1930 to 1931
J. M. Parrott, M.D. ⁶	Kinston	State Board of Health	1929 to 1935
Chas. C. Orr, M.D. ⁶	Asheville	Gov. O. Max Gardner	1931 to 1935
J. M. Parrott, M.D. ⁵	Kinston	State Society	1931 to 1935
C. V. Reynolds, M.D.	Asheville	State Society	1931 to 1933
L. B. Evans, M.D.	Windsor	State Society	1931 to 1933
S. D. Craig, M.D.	Winston-Salem	State Society	1931 to 1933
John T. Burrus, M.D.	High Point	Gov. O. Max Gardner	1931 to 1933
J. N. Johnson, D.D.S.	Goldsboro	Gov. O. Max Gardner	1931 to 1933
J. A. Goode, Ph.G.	Asheville	Gov. O. Max Gardner	1931 to 1933
H. L. Large, M.D.	Rocky Mount	Gov. O. Max Gardner	1931 to 1935
H. G. Baily, C.E.	Chapel Hill	Gov. O. Max Gardner	1931 to 1935

¹ Died leaving unexpired term.² Resigned to become member of General Assembly.³ Resigned to become Health Officer Vance County.⁴ Resigned.⁵ Resigned to become Secretary of State Board of Health⁶ Term terminated on account of the reorganization of the State Board of Health by General Assembly.

Name	Address	Appointed by	Term
Grady G. Dixon, M.D. ⁷	Ayden	Ex. Com. State Society	1931 to 1932
Grady G. Dixon, M.D. ⁷	Ayden	State Society	1932 to 1935
S. D. Craig, M.D.	Winston-Salem	State Society	1933 to 1937
W. T. Rainey, M.D.	Fayetteville	State Society	1933 to 1937
J. N. Johnson, D.D.S.	Goldsboro	Gov. J. C. B. Ehringhaus	1933 to 1937
Hubert B. Haywood, M.D.	Raleigh	Gov. J. C. B. Ehringhaus	1933 to 1937
James P. Stowe, Ph.G.	Charlotte	Gov. J. C. B. Ehringhaus	1933 to 1937
Grady G. Dixon, M.D.	Ayden	State Society	1935 to 1939
J. LaBruce Ward, M.D.	Asheville	State Society	1935 to 1939
H. Lee Large, M.D.	Rocky Mount	Gov. J. C. B. Ehringhaus	1935 to 1939
H. G. Baity, C.E.	Chapel Hill	Gov. J. C. B. Ehringhaus	1935 to 1939
J. N. Johnson, D.D.S.	Goldsboro	Gov. Clyde R. Hoey	1937 to 1941
Hubert B. Haywood, M.D.	Raleigh	Gov. Clyde R. Hoey	1937 to 1941
James P. Stowe, Ph.G.	Charlotte	Gov. Clyde R. Hoey	1937 to 1941
S. D. Craig, M.D.	Winston-Salem	State Society	1937 to 1941
W. T. Rainey, M.D.	Fayetteville	State Society	1937 to 1941
Grady G. Dixon, M.D.	Ayden	State Society	1939 to 1943
J. LaBruce Ward, M.D.	Asheville	State Society	1939 to 1943
H. Lee Large, M.D.	Rocky Mount	Gov. Clyde R. Hoey	1939 to 1943
H. G. Baity, Sc.D.	Chapel Hill	Gov. Clyde R. Hoey	1939 to 1943
C. C. Fordham, Jr., Ph.G. ⁹	Greensboro	Gov. Clyde R. Hoey	1940 to 1943
S. D. Craig, M.D.	Winston-Salem	State Society	1941 to 1945
W. T. Rainey, M.D.	Fayetteville	State Society	1941 to 1945
Hubert B. Haywood, M.D.	Raleigh	Gov. J. Melville Broughton	1941 to 1945
J. N. Johnson, D.D.S.	Goldsboro	Gov. J. Melville Broughton	1941 to 1945
James O. Nolan, M.D.	Kannapolis	Gov. J. Melville Broughton	1941 to 1945
Grady G. Dixon, M.D.	Ayden	State Society	1943 to 1947
J. LaBruce Ward, M.D.	Asheville	State Society	1943 to 1947
H. Lee Large, M.D.	Rocky Mount	Gov. J. Melville Broughton	1943 to 1947
Larry I. Moore, Jr.	Wilson	Gov. J. Melville Broughton	1943 to 1947
S. D. Craig, M.D., Pres.	Winston-Salem	State Society	1945 to 1949
W. T. Rainey, M.D.	Fayetteville	State Society	1945 to 1949
Hubert B. Haywood, M.D.	Raleigh	Gov. R. Gregg Cherry	1945 to 1949
James O. Nolan, M.D.	Kannapolis	Gov. R. Gregg Cherry	1945 to 1949
Paul Jones, D.D.S. ⁹	Farmville	Gov. R. Gregg Cherry	1946 to 1949
Jasper C. Jackson, Ph.G. ¹⁰	Lumberton	Gov. R. Gregg Cherry	1945 to 1947
Grady G. Dixon, M.D., Pres.	Ayden	State Society	1947 to 1951
H. Lee Large, M.D.	Rocky Mount	Gov. R. Gregg Cherry	1947 to 1951
J. LaBruce Ward, M.D.	Asheville	State Society	1947 to 1951
Hubert B. Haywood, M.D.	Raleigh	Gov. W. Kerr Scott	1949 to 1953
Mrs. James B. Hunt	Lucama	Gov. W. Kerr Scott	1949 to 1953
A. C. Current, D.D.S.	Gastonia	Gov. W. Kerr Scott	1949 to 1953
John R. Bender, M.D.	Winston-Salem	State Society	1949 to 1953
Benjamin J. Lawrence, M.D.	Raleigh	State Society	1949 to 1953
G. Grady Dixon, M.D.	Ayden	Medical Society	1951 to 1955
George Curtis Crump, M.D.	Asheville	Medical Society	1951 to 1955
John P. Henderson, Jr., M.D. ¹¹	Sneads Ferry	Gov. Wm. B. Umstead	1954 to 1955
H. C. Lutz, Phg.	Hickory	Gov. W. Kerr Scott	1951 to 1955
Hubert B. Haywood, M.D. ¹²	Raleigh	Gov. Wm. Umstead	1953 to 1957
Mrs. J. E. Latta	Hillsboro	Gov. Wm. Umstead	1953 to 1957
A. C. Current, D.D.S.	Gastonia	Gov. Wm. Umstead	1953 to 1957
John R. Bender, M.D.	Winston-Salem	Medical Society	1953 to 1957
Benjamin J. Lawrence, M.D.	Raleigh	Medical Society	1953 to 1957
G. Grady Dixon, M.D. ¹⁵	Ayden	Medical Society	1955 to 1959
George Curtis Crump, M.D. ¹²	Asheville	Medical Society	1955 to 1959
Roger W. Morrison, M.D. ¹⁴	Asheville	Medical Society	1957 to 1957
John P. Henderson, Jr., M.D.	Sneads Ferry	Gov. Luther H. Hodges	1955 to 1959
H. C. Lutz, Phg.	Hickory	Gov. Luther H. Hodges	1955 to 1959
Lenox D. Baker, M.D. ¹³	Durham	Gov. Luther H. Hodges	1956 to 1957
Earl W. Brain, M.D. ¹⁶	Raleigh	Medical Society	1958 to 1959
Mrs. J. E. Latta	Hillsboro	Gov. Luther H. Hodges	1957 to 1961
Roger W. Morrison, M.D.	Asheville	Medical Society	1957 to 1959
John R. Bender, M. D.	Winston-Salem	Medical Society	1957 to 1961
Z. L. Edwards, D.D.S.	Washington	Gov. Luther H. Hodges	1957 to 1961
Chas. R. Bugg, M.D., Pres. ¹⁷	Raleigh	Medical Society	1957 to 1961
Lenox D. Baker, M.D.	Durham	Gov. Luther H. Hodges	1957 to 1961

7 To fill vacancy caused by resignation of Dr. J. M. Parrott.

8 To fill vacancy caused by the death of James P. Stowe, Ph.G.

9 To fill vacancy caused by resignation of J. N. Johnson, D.D.S.

10 To fill vacancy caused by resignation of Larry I. Moore, Jr.

11 To fill vacancy caused by the death of Dr. H. Lee Large.

12 Resigned

13 To fill vacancy caused by resignation of Dr. Hubert B. Haywood.

14 To fill vacancy caused by resignation of Dr. George Curtis Crump

15 Died leaving unexpired term.

16 To fill vacancy caused by the death of Dr. G. Grady Dixon.

17 Died leaving unexpired term.

ROSTER OF MEMBERS OF THE BOARD OF HEALTH
OF THE STATE OF NORTH CAROLINA

Name	Address	Appointed by	Term
Ben W. Dawsey, D.V.M.	Gastonia	Gov. Luther H. Hodges	1959 to 1963
Rogert W. Morrison, M.D.	Asheville	Medical Society	1959 to 1963
Jasper C. Jackson, Phg.	Lumberton	Gov. Luther H. Hodges	1959 to 1963
Oscar S. Goodwin, M.D.	Apex	Medical Society	1959 to 1963
*Chas. R. Bugg, M.D., Pres.	Raleigh	Medical Society	1961 to 1965
Lenox D. Baker, M.D.	Durham	Gov. Terry Sanford	1961 to 1965
D. T. Redfern	Wadesboro	Gov. Terry Sanford	1961 to 1965
Glenn L. Hooper, D.D.S.	Dunn	Gov. Terry Sanford	1961 to 1965
John R. Bender, M.D.	Winston-Salem	Medical Society	1961 to 1965
John S. Rhodes, M.D. ¹⁸	Raleigh	Medical Society	1961 to 1965
S. G. Koonce	Chadbourn	Gov. Terry Sanford	1963 to 1967
James S. Raper, M.D.	Asheville	Medical Society	1963 to 1967
Ben W. Dawsey, D.V.M.	Gastonia	Gov. Terry Sanford	1963 to 1967
Joseph S. Hiatt, Jr., M.D.	Southern Pines	Medical Society	1965 to 1969
Howard Paul Steiger, M.D.	Charlotte	Medical Society	1965 to 1969
James S. Raper, M.D.	Asheville	Medical Society	1967 to 1971
Paul F. Maness, M.D.	Burlington	Medical Society	1967 to 1971
Joseph S. Hiatt, Jr., M.D.	Southern Pines	Medical Society	1969 to 1973
Jesse H. Meredith, M.D.	Winston-Salem	Medical Society	1969 to 1973
Lenox D. Baker	Durham	Gov. Robert W. Scott	1969 to 1973

18. Fill vacancy caused by death of Dr. Chas. R. Bugg.

ROSTER OF MEMBERS OF THE VARIOUS BOARDS OF MEDICAL EXAMINERS OF THE STATE OF
NORTH CAROLINA

FIRST BOARD

James H. Dickson, Wilmington	1859-1866
Charles E. Johnson, Raleigh	1859-1866
Caleb Winslow, Hertford	1859-1866
Otis F. Manson, Townsville	1859-1866
William H. McKee, Raleigh	1859-1866
Christopher Happoldt, Morganton	1859-1866
J. Graham Tull, New Bern	1859-1866
Samuel T. Iredell, Secretary	1859-1866

SECOND BOARD

N. J. Pittman, Tarboro	1866-1872
E. Burke Haywood, Raleigh	1866-1872
R. H. Winborne, Edenton	1866-1872
S. S. Satchwell, Rocky Point	1866-1872
J. J. Summerell, Salisbury	1866-1872
R. B. Haywood, Raleigh	1866-1872
M. Whitehead, Salisbury	1866-1872
J. F. Shaffner, Salem	1866-1872
William Little, Secretary	1866-1872
Thomas F. Wood, Secretary, Wilmington	1867-1872

THIRD BOARD

Charles J. O'Hagan, Greenville	1872-1878
W. A. B. Norcom, Edenton	1872-1878
C. Tate Murphy, Clinton	1872-1878
George A. Foote, Warrenton	1872-1878
J. W. Jones, Tarboro	1872-1878
R. L. Payne, Lexington	1872-1878
Charles Duffy, Jr., Secretary, New Bern	1872-1878

FOURTH BOARD

Peter E. Hines, Raleigh	1878-1884
Thomas D. Haigh, Fayetteville	1878-1884
George L. Kirby, Goldsboro	1878-1884
Thomas F. Wood, Wilmington	1878-1884
Joseph Graham, Charlotte	1878-1884
Robert I. Hicks, Williamston ¹	1878-1880
Richard H. Lewis, Raleigh ²	1880-1884
Henry T. Bahnson, Secretary, Salem	1878-1884

FIFTH BOARD

William R. Wood, Scotland Neck	1884-1890
Augustus W. Knox, Raleigh	1884-1890
Francis Duffy, New Bern	1884-1890
Patrick L. Murphy, Morganton	1884-1890
Willis Alston, Littleton	1884-1890
J. A. Reagan, Weaverville	1884-1890
W. J. H. Bellamy, Secretary, Wilmington	1894-1890

SIXTH AND SEVENTH BOARDS³

R. L. Payne, Jr., Lexington	1890-1892
George W. Purefoy, Asheville	1890-1892
George G. Thomas, Wilmington	1890-1894
Robert S. Young, Concord	1890-1894
William H. Whitehead, Rocky Mount	1890-1896
George W. Long, Graham	1890-1896
L. J. Picot, Secretary, Littleton	1890-1896
Julian M. Baker, Tarboro	1892-1898
H. B. Weaver, Secretary, Asheville	1892-1898
J. M. Hays, Greensboro ⁴	1894-1897
Kemp P. Battle, Jr., Raleigh ⁵	1897-1900
Thomas S. Burbank, Wilmington ¹	1894-1898
Richard S. Whitehead, Chapel Hill ⁴	1896-1898
William H. H. Cobb, Goldsboro ⁶	1898-1900
J. Howell Way, Secretary, Waynesville ⁷	1898-1902
David T. Tayloe, Washington	1896-1902
Thomas E. Anderson, Sec., Statesville	1896-1902
Albert Anderson, Wilson ⁸	1896-1902
Edward C. Register, Charlotte ⁸	1898-1902
Thomas S. McMullan, Hertford ⁸	1900-1902
John C. Walton ⁸	1900-1902

EIGHTH BOARD

A. A. Kent, Lenoir	1902-1908
Charles O'H. Laughinghouse, Greenville	1902-1908
M. H. Fletcher, Asheville	1902-1908
James M. Parrott, Kinston	1902-1908
J. T. J. Battle, Greensboro	1902-1908
Frank H. Russell, Wilmington	1902-1908
George W. Pressly, Secretary, Charlotte ¹	1902-1906
G. T. Sikes, Secretary, Grissom ⁹	1906-1908

NINTH BOARD

Lewis B. McBrayer, Asheville	1908-1914
John C. Rodman, Washington	1908-1914
William W. McKenzie, Salisbury	1908-1914
Henry H. Dodson, Greensboro	1908-1914
John Bynum, Winston-Salem	1908-1914
J. L. Nicholson, Richlands	1908-1914
Benj. K. Hays, Secretary, Oxford	1908-1914

TENTH BOARD

Isaac M. Taylor, Morganton	1914-1920
John Q. Myers, Charlotte	1914-1920
Jacob F. Highsmith, Fayetteville	1914-1920
Martin L. Stevens, Asheville	1914-1920
Charles T. Harper, Wilmington ⁴	1914-1915
Edwin G. Moore, Elm City ¹⁰	1915-1920
John G. Blount, Washington ¹¹	1914-1920
Hubert A. Royster, Secretary, Raleigh	1914-1920

ELEVENTH BOARD

Lester A. Crowell, Lincolnton	1920-1926
William P. Holt, Duke	1920-1926
J. Gerald Murphy, Wilmington	1920-1926
Lucius N. Glenn, Gastonia	1920-1926
Clarence A. Shore, Raleigh	1920-1926
William M. Jones, Greensboro	1920-1926
Kemp P. B. Bonner, Sec., Morehead City	1920-1926

TWELFTH BOARD

Paul H. Ringer, Asheville	1926-1932
W. Houston Moore, Wilmington	1926-1932
T. W. M. Long, Roanoke Rapids	1926-1932
W. W. Dawson, Grifton ⁴	1926-1930
J. K. Pepper, Winston-Salem	1926-1932
Foy Roberson, Durham	1926-1932
John W. McConnell, Secretary, Davidson	1926-1932
David T. Tayloe, Jr., Washington ¹²	1930-1932

THIRTEENTH BOARD

Ben F. Royal, Morehead City	1932-1938
Benj. J. Lawrence, Secretary, Raleigh	1932-1938
F. Webb Griffith, Asheville	1932-1938
Hamilton W. McKay, Charlotte	1932-1938
J. W. Vernon, Morganton	1932-1938
W. H. Smith, Goldsboro	1932-1938
K. G. Averitt, Cedar Creek ⁴	1932-1936
Roscoe D. McMillan, Red Springs ¹³	1936-1938

FOURTEENTH BOARD

Karl B. Pace, Greenville	1938-1944
William M. Coppridge, Durham	1938-1944
Frank A. Sharpe, Greensboro	1938-1944
Lewis W. Elias, Asheville ⁴	1938-1943
J. Street Brewer, Roseboro	1938-1944
W. D. James, Secretary, Hamlet	1938-1944
L. A. Crowell, Jr., Lincolnton	1938-1944
John LaBruce Ward, Asheville ¹⁴	1943-1944

FIFTEENTH BOARD

C. W. Armstrong, Salisbury	1944-1950
Paul G. Parker, Erwin	1944-1950
M. D. Bonner, Jamestown	1944-1950
T. Leslie Lee, Kinston	1944-1950
Roy B. McKnight, Charlotte	1944-1950
M. A. Pittman, Wilson	1944-1950
Ivan M. Proctor, Secretary, Raleigh	1944-1950
James B. Bullitt, Chapel Hill ¹⁵	1949-1950
Paul F. Whitaker, Kinston ¹⁶	1950

SIXTEENTH BOARD

Amos N. Johnson, Garland	1950-1956
Heyward C. Thompson, Shelby	1950-1956
James P. Rousseau, Winston-Salem	1950-1956
Newsom P. Battle, Rocky Mount	1950-1956
Clyde R. Hedrick, Lenoir	1950-1956
L. Randolph Doffermyre, Dunn	1950-1956
G. Westbrook Murphy, Asheville ¹⁷	1955
Joseph J. Combs, Secretary, Raleigh	1950-1956

SEVENTEENTH BOARD

Carl Vann Tyner, M.D., Leaksville	1956-1962
Joseph John Combs, M.D., Raleigh	1956-1962
John Bascom Anderson, M.D., Asheville	1956-1962
Thomas Williams Baker, M.D., Charlotte	1956-1962
Edwin Albert Rasberry, Jr., M.D., Wilson	1956-1962
Thomas G. Thurston, M.D., Salisbury	1956-1962
Luther Randolph Doffermyre, M.D., Dunn	1956-1962
Carl Vann Tyner, M.D., Leaksville	1956-1962
John Bascom Anderson, M.D., Asheville	1956-1962
Thomas Williams Baker, M.D., Charlotte	1956-1962
Erwin Albert Rasberry, Jr., M.D., Wilson	1956-1962
Thomas G. Thurston, M.D., Salisbury	1956-1962
Luther Randolph Doffermyre, M.D., Dunn	1956-1962

EIGHTEENTH BOARD¹⁸

Frank Edmondson, Jr., Asheboro, Pres.	1962-1964
Re-elected (6-yr. term)	1964-1970
Ralph G. Templeton, Lenoir ¹⁹	1962-1964
Re-elected (6-yr. term)	1964-1970
Joseph John Combs, Secretary, Raleigh	1962-1964
Re-elected (6-yr. term)	1966-1972
H. Lee Large, Jr., Charlotte	1962-1966
Re-elected (6-yr. term)	1966-1972
Jamse E. Davis, Durham	1962-1968
W. Boyd Owen, Waynesville	1962-1968
Clark Rodman, Washington	1962-1968
Vernon W. Taylor, Jr., M.D., Elkin ²⁰	1966-1970

NINETEENTH BOARD

Clark Rodman, Washington, President	1962-1968
Joseph J. Combs, Raleigh, Secretary	1966-1972
James E. Davis, Durham	1962-1968
Frank Edmondson, Jr., Asheboro	1964-1970
H. Lee Large, Jr., Charlotte	1966-1972
W. Boyd Owen, Waynesville	1962-1968
Vernon W. Taylor, Jr., Elkin	1966-1970

TWENTIETH BOARD

James E. Davis, Durham, President	1962-1968
Joseph J. Combs, Raleigh, Secretary	1966-1972
Frank Edmondson, Jr., Asheboro	1964-1970
H. Lee Large, Jr., Charlotte	1966-1972
W. Boyd Owen, Waynesville	1962-1968
Vernon W. Taylor, Jr., Elkin	1966-1970
Clark Rodman, Washington	1962-1968

TWENTY-FIRST BOARD

W. Boyd Owen, Waynesville, President	1962-1968
Joseph J. Combs, Raleigh, Secretary	1966-1972
H. Lee Large, Jr., Charlotte	1966-1972
Vernon W. Taylor, Jr., Elkin	1966-1970
James E. Davis, M.D., Durham	1962-1968
Frank Edmondson, Jr., Asheboro	1964-1970
Clark Rodman, Washington	1962-1968

TWENTY-SECOND BOARD

Frank Edmondson, Jr., Asheboro, Pres.	1964-1970
Joseph J. Combs, Raleigh, Secretary	1966-1972
Bryant L. Galusha, Charlotte	1968-1974
Joseph W. Hooper, Jr., Wilmington	1968-1974
H. Lee Large, Jr., Charlotte	1966-1972
Cornelius T. Partrick, Washington	1968-1974
Vernon W. Taylor, Jr., Elkin	1964-1970

TWENTY-THIRD BOARD

Vernon W. Taylor, Jr., Elkin, President	1964-1970
Joseph J. Combs, Raleigh, Secretary	1966-1972
Bryant L. Galusha, Charlotte	1968-1974
Frank Edmondson, Jr., Asheboro	1964-1970
Joseph W. Hooper, Jr., Wilmington	1968-1974
H. Lee Large, Jr., Charlotte	1966-1972
Cornelius T. Partrick, Washington	1968-1974

1 Resigned before expiration of term.

2 Elected for unexpired term of Dr. Hicks.

3 In 1890 the Medical Society of the State of North Carolina adopted the plan of electing members of the Board in such a manner that the terms would expire at different intervals of two years. This practice was followed for twelve years, or until 1902, when the plan was abandoned; an equivalent of two terms of six years each. It is evident that the Society arranged to abandon the policy as early as 1898, as two members were elected for short terms, and two years later two other members were elected for still shorter terms. It is therefore impossible to separate the sixth and seventh Boards, since the membership was overlapping.

4 Died before the expiration of his term.

5 Elected to serve unexpired term of Dr. Hays.

6 Elected to serve the unexpired term of Dr. Burbank.

7 Elected to serve the unexpired term of Dr. Whitehead.

8 Elected for short term expiring in 1902.

9 Elected to serve the unexpired term of Dr. Pressly.

10 Elected to serve the unexpired term of Dr. Harper.

11 Died a few months before the expiration of his term; such a short time that the vacancy was not filled.

12 Elected to serve unexpired term of Dr. W. W. Dawson.

13 Elected to serve unexpired term of Dr. Averitt.

14 Elected to serve the unexpired term of Dr. Elias.

15 Elected to serve unexpired term of Dr. T. Leslie Lee.

16 Elected to serve unexpired term of Dr. Paul G. Parker.

17 Elected to serve unexpired term of Dr. James P. Rousseau.

18 In 1962 the Medical Society of the State of North Carolina adopted a plan for election members of the Board in such a manner that some of the terms would expire at intervals of two years, hence the varying terms of the first-selected board members.

19 Died before expiration of term.

20 Elected to serve unexpired term of Dr. Ralph P. Templeton.

MEDICAL AWARDS

MOORE COUNTY MEDICAL SOCIETY MEDAL

In 1927 the Moore County Medical Society established a fund, the interest from which is used to pay for a medal to be given for the best paper read at the State Society meeting each year. No one is eligible to receive this medal except Fellows of the Medical Society of the State of North Carolina in good standing; no invited guest is allowed to compete.

Each Section Chairman selected a committee of three to decide on the best paper written in their section. The winning papers are then turned over to the State Committee, who select the one to receive the medal. The following Fellows have been awarded this medal:

- 1928—Paul Pressly McCain, M.D. Sanatorium
"The Diagnosis and Significance of Juvenile Tuberculosis"
(From the Section on Pediatrics)
- 1929—A. B. Holmes, M.D. Fairmont
"The Treatment of Uremia"
(From the Section on Chemistry, Materia Medica and Therapeutics)
- 1930—C. T. Smith, M.D., and W. Bernard Kinlaw, M.D. Rocky Mount
"The Clinical Consideration of Anemia of Pregnancy and of Puerperium"
(From Section on Practice of Medicine)
- 1931—F. C. Smith, M.D. Charlotte
"Practical Value of Perimetry in Intracranial Conditions; Case Reports" (tumors, vascular disease, toxemia, syphilis and trauma)
(From Section on Eye, Ear, Nose and Throat)
- 1932—Charles I. Allen, M.D. Wadesboro
"An Improved Splint for Treating Fractures of the Lower Extremity Showing Reduction and Skeletal Distraction Attachments"
(From Section on Surgery)
- 1933—H. L. Sloan, M.D. Charlotte
"Some General Remarks about Cataract Surgery, With Report of 100 Consecutive Uncomplicated Cataract Operations"
(From Section on Ophthalmology and Otolaryngology)
- J. R. Adams, M.D. Charlotte
"Hypo-glycaemia in Children"
(From Section on Pediatrics)
- 1934—Fred E. Motley, M.D., Charlotte
"Complications of Mastoiditis with Special Reference to Septicemia"
(From Section on Ophthalmology and Otolaryngology)
- 1935—Arthur H. London, M.D. Durham
"The Composition of an Average Pediatrics Practice"
(From Section on Pediatrics)
- 1936—V. K. Hart, M.D. Charlotte
"Etiological and Therapeutic Aspects of Bronchiectasis with Clinical Observations on Bronchial Lavage by the Stitt Method"
(From Section on Ophthalmology and Otolaryngology)
- 1937—No award made.
- 1938—O. Hunter Jones, M.D. Charlotte
"Pelvic Architecture and Classification with its Practical Application"
(From Section on Gynecology and Obstetrics)
- 1939—Donnell B. Cobb, M.D. Goldsboro
"Vaginal Uterolithotomy"
(From Section on Surgery)
- 1940—C. R. Monroe, M.D., C. D. Thomas, M.D., and C. L. Gray, M.D. Pinehurst
"Thoracoplasty and Apicolysis"
(From Section on Surgery)
- 1941—Walter R. Johnson, M.D. Asheville
"Is Diverticulitis of the Colon a Surgical Disease?"
(From Section on Practice of Medicine)
- 1942—E. P. Alyea, M.D. Durham
"Castration for Carcinoma of the Prostate Gland"
(From Section on Surgery)
- 1943—No award made.
- 1944—D. F. Milam, M.D. Chapel Hill
"Vitamin C Content of Some North Carolina Cooked Foods"
(From Section on Public Health and Education)
- 1945—No Meeting.
- 1946—E. C. Hamblen, M.D. Durham
"Some Aspects of Sex Endocrinology in General Practice"
(From Section on General Practice of Medicine and Surgery)
- 1947—W. L. Thomas, M.D. Durham
"Some Psychosomatic Problems in Gynecology"
(From Section on Gynecology and Obstetrics)
- 1948—Felda Hightower, M.D. Winston-Salem
"The Control of Electrolyte and Water Balance in Surgical Patients"
(From Section on Surgery)
- 1949—George J. Baylin, M.D. Durham
"The Roentgen Aspect of Non-Opaque Pulmonary Foreign Bodies"
(From Section on Radiology)
- 1950—Parker R. Beamer, M.D. Winston-Salem
"Studies on Experimental Leptospirosis"
(From Section on Pathology)
- 1951—John P. U. McLeod, M.D. Marshville
"A Simplified Modification for Staining of the Vaginal Smear for Immediate Appraisal of Endocrine Activity"
(From Section on Gynecology and Obstetrics)
- 1952—Samuel F. Ravenel, M.D. Greensboro
"Humidification in Pediatrics"
(From Section on Pediatrics)
- 1953—Harrie R. Chamberlin, M.D. Chapel Hill
"Diagnosis and Management of Poisoning Due to Organic Phosphate Insecticides"
(From Section on Pediatrics)
- 1954—Paul Kimmelstiel, M.D. Charlotte
Roland T. Pixley, M.D. Charlotte
John Crawford, M.D. Charlotte
"Statistical Review of Twenty-two Thousand Cases Examined by Cervical Smears"
(From Section on Pathology)
- 1955—H. Hugh Bryan, M.D. Chapel Hill
"Obesity and the Public Health"
(From Section on Public Health)
- 1956—Wm. M. Peck, M.D. McCain
"The Changing Pattern of Tuberculosis"
(Section PH&E)
- 1957—John R. Ashe, Jr., M.D. Concord
John V. Arey, M.D. Concord
"The Use of Diamox in Obstetrics and Gynecology"
(From Section on Obstetrics and Gynecology)
- 1958—John O. Lafferty, M.D.
"Peptic Ulcers in Children"
(From Section on Radiology)
- 1959—Robert E. Coker, Jr., M.D. Chapel Hill
"The Medical Student and Specialization"
(From Section on Public Health & Education)
- 1960—William J. A. DeMaria, M.D. Durham
"Management of Childhood Nephrosis"
(From Section on Pediatrics)
- 1961—William W. Shingleton, M.D. Durham
"Some Recent Clinical and Experimental Advances Relative to Diseases of the Biliary Tracts and Pancreas"
(From Section on Surgery)
- 1962—Frank C. Greiss, Jr., M.D. Winston-Salem
"Inevitable, Incomplete and Septic Abortions"
(From Section on Obstetrics & Gynecology)
- 1963—No Awards.

- 1964—Christopher Columbus Fordham, III, M.D. Chapel Hill
 "Problems in the Diagnosis of Renal Parenchyma Disease"
 (From Section on General Practice of Medicine)
- 1965—Archie Lipe Barringer, M.D. Mount Pleasant
 "CHRONIC URETHRITIS IN THE FEMALE"
 (From Section on General Practice of Medicine)
- 1966—Stewart M. Scott, M.D. Oteen
 "FEMORO-POPLITEAL ARTERIAL OBSTRUCTION"
 (From Section on Surgery)
- 1967—M. Carlyle Crenshaw, Jr., M.D. Durham
 "PREMATURE SEPARATION OF THE NORMALLY IMPLANTED PLACENTA"
 (From Section on Obstetrics & Gynecology)
- 1968—No Award.

THE GEORGE MARION COOPER AWARD

The Fellows of the Wake County Medical Society present this George Marion Cooper Award established in honor of George Marion Cooper, physician and health benefactor.

This medal is awarded by the Fellows of the Wake County Medical Society as a token of appreciation and esteem in recognition of the eminence of an essay contributing to the knowledge and advancement of the science of medicine in the field of Preventive Medicine, Public Health, or Maternal and Infant Health Care, presented before the Medical Society of the State of North Carolina. The following Fellows have been awarded this medal:

- 1951—Donald L. Whitener, M.D. Winston-Salem
 "The Management of Labor and Delivery in the Interest of the Premature Infant"
 (From Section on Gynecology and Obstetrics)
- 1952—Ronald Stephen, M.D., Senior Author; Duke University Durham
 "The Evaluation of Methods of Pain Relief During Labor and Delivery with Reference to Mother and Child"
 (From Section on Gynecology and Obstetrics)
- 1953—Ernest Craige, M.D. Chapel Hill
 "The Prevention of Recurrences of Rheumatic Fever"
 (From the Section on Practice of Medicine)
- 1954—Richard L. Pearse, M.D. Durham
 Eleanor Easley, M.D. Durham

- Kenneth Podger, M.D. Durham
 "Obstetric Analgesia and Anesthesia"
 (From Section on Obstetrics and Gynecology)
- 1955—Dirk Verhaeff, M.D. Huntersville
 William M. Peck, M.D. McCain
 "The Trends in Management of Tuberculosis in Children"
 (From Section on Pediatrics)
- 1956—Benjamin A. Johnson, M.D. Durham
 Susan C. Dees, M.D. Durham
 "Immunization of Allergic Children with Particular Reference to Eczema Vaccinatum"
 (From Section on Pediatrics)
- 1957—Walter A. Sikes, M.D. Raleigh
 John D. Patton, M.D. Asheville
 Robert L. Craig, M.D. Asheville
 Marie Baldwin, M.D. Asheville
 Anne Sagberg, M.D. Asheville
 R. Charman Carroll, M.D. Asheville
 "Trends in the Development of an Open Psychiatric Hospital"
 (From Section on Neurology on Psychiatry)
- 1958—Madison S. Spach, M.D.
 Jerome S. Harris, M.D.
 "Congenital Heart Disease in Infancy"
 (From Section on Pediatrics)
- 1959—Roy T. Parker, M.D. Durham
 Harry W. Johnson, M.D. Durham
 F. Bavard Carter, M.D. Durham
 "Obstetric Shock"
 (From Section on General Practice of Medicine)
- 1960—Courtney D. Egerton, M.D. Raleigh
 Robert J. Ruark, M.D. Raleigh
 "Continuous Caudal Analgesia in Private Practice"
 (From Section on Obstetrics & Gynecology)
- 1961—Kenneth D. Hall, M.D. Durham
 "Post-Anesthetic Care of the Geriatric Patient"
 (From Section on Anesthesiology)
- 1962—Jesse P. Chapman, Jr., M.D. Asheville
 "Thoracic Trauma and Its Treatment"
 (From Section on Orthopaedics and Traumatology)
- 1963—No Awards.
- 1964—Robert Stevenson Lackey, M.D. Charlotte
 "Special Procedures in a Community Hospital"
 (From Section on Radiology)
- 1965—No Awards.
- 1966—No Award.
- 1967—Robert Griffin Brame, M.D. Winston-Salem
 "SEPTIC ABORTION"
 (From Section on Obstetrics & Gynecology)

1968—No Award.

GASTON COUNTY MEDICAL SOCIETY AWARD

By authority of the House of Delegates an award is established by the Gaston County Medical Society for the best presentation of audio-visual material in scientific treatise and will be awarded to the best presentation annually at the Annual Session of the State Society. Competition will be restricted to audio-visual material as provided by the rules. Program Chairmen of the eleven scientific sections should take note of this in the preparation of the 1956 program and in judging of presentations at the Annual Session in 1956. The following Fellows have been awarded this medal.

- 1952—Kenneth L. Pickrell, M.D. Durham
 "Tattooing the Cornea"
 (From Scientific Exhibits)
- 1953—Joseph E. Markee, M.D. Durham
 "Autonomic Nervous System"
 (Film from Audio-Visual Postgraduate Instructional Program)
- 1954—William H. Boyce, M.D. Winston-Salem
 Fred K. Garvey, M.D. Winston-Salem
 Charles M. Norfleet, M.D. Winston-Salem
 "Biocolloids of Urine in Health and in Calculous Disease"
 (From Scientific Exhibits)
- 1955—Caleb Young, M.D. Winston-Salem
 "Congenital Dislocation of the Hip"
 (A motion picture)
 (From Postgraduate Audio-Visual Program)
- 1956—C. R. Stephen, M.D. Durham
 R. C. Martin, M.D. Durham
 Bourgeois-Gavardin. Durham
 "Prophylaxis of Non-Hemolytic Transfusion Reactions: Value of Pyribenzamine"
 (From Section on Anesthesia)
- 1957—J. Leonard Goldner, M.D. Durham
 Mr. Bert Titus Durham
 "The Juvenile Amputee-Upper Extremity"
 (From Section on General Practice of Medicine)
- 1958—T. Franklin Williams, M.D.
 J. L. DeWalt, M.D.
 R. W. Winter, M.D.
 Charles H. Burnett, M.D.
 "Newer Diagnostic Criteria in Hyperparathyroidism"
 (From 1958 Scientific Exhibits)
- 1959—Albert G. Smith, M.D. Durham
 "Automation in the Clinical Chemistry Laboratory"
- 1960—Paul W. Sanger, M.D. Charlotte
 "Surgical Management of Deformities of the Anterior Chest"
 (From 1960 Scientific Exhibits)
- 1961—Robert Page Morehead, M.D. Winston-Salem
 "Tumor Formation"
 (1961 Scientific Exhibits)
- 1962—Paul W. Sanger, M.D. Charlotte
 "Closure of Ventricular Septal Effects—Presentation of New Methods"
 (1962 Scientific Exhibits)
- 1963—No Awards.
- 1964—Joseph William Eades, M.D. Greensboro
 Hilliard Foster Seigler, M.D. Greensboro
 "Hand Rehabilitation Center" Chapel Hill
 (1964 Scientific Exhibits)
- 1965—Carl N. Patterson, M.D. Durham
 "PHYSIOLOGIC SEPTOPLASTY AND RHINOPLASTY"
 (From Section on Ophthalmology & Otolaryngology)
- 1966—No Award.
- 1967—Vernon Hinson Youngblood, M.D., and
 Edwin Merrill Tomlin, M.D. Concord
 "AN ORAL ANTI-INFLAMMATORY AGENT FOR URETERAL CALCULI"
 (1967 Scientific Exhibits)

1968—No Award.

HISTORICAL DATA

H-13

STATUS OF SOCIETY MEMBERSHIP BY COUNTIES FOR YEARS 1956-1969

COUNTY	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Alamance-Caswell	62	63	65	66	66	67	70	70	72	71	76	72	73	77
Alexander 1								7	6	5		4	4	4
Alleghany 2						4	11	4	4	6	6			
Anson	10	10	8	8	10		8	8	9	6	7	7	7	7
Ashe 3	11	8	8	9	13	8		8	8	8	6			
Ashe-Alleghany												12	12	12
Ashe-Watauga														
Avery 4	8	9	9	9	11	10	10	13	11	11	12	10	9	12
Beaufort	16	17	20	19	18	19	37	20	22	21	21			
Beaufort-Hyde-Martin- Washington-Tyrrell												38	38	38
Bertie	10	10	10	10	10	10	8	8	9	8	8	7	8	8
Bladen	11	11	12	11	12	10	10	10	10	10	9	9	8	8
Brunswick									5	5	5			
Buncombe	174	175	175	170	170	172	175	174	179	189	183	179	181	184
Burke	38	35	36	34	34	35	36	36	40	43	43	41	41	41
Cabarrus	52	59	59	58	62	60	61	58	59	57	63	61	59	61
Caldwell	26	28	27	26	27	29	31	32	34	34	31	28	26	28
Camden 5									1	1				
Carteret	16	17	18	19	20	20	20	20	19	21	21	22	20	20
Caswell 6									1	1				
Catawba	46	47	49	51	52	53	58	61	64	65	65	65	74	68
Chatham	11	11	12	13	13	15	13	14	12	9	10	9	9	9
Cherokee	10	11	11	10	10	11	10	11	11	10	11	11	11	10
Chowan-Perquimans	12	12	10	11	10	9	11	11	10	10		8	9	9
Clay 7														
Cleveland	44	47	45	45	46	43	44	49	48	49	49	55	52	53
Columbus	19	23	22	24	23	21	20	22	22	21	20	19	19	19
Craven	25	24	27	27	26	28	28	31	31	31	35			
Craven-Pamlico												36	35	36
Cumberland	51	50	56	58	58	59	59	60	58	60	64	63	66	65
Currituck 8									2	2				
Dare 5									2	2				
Davidson	35	35	40	43	41	40	38	38	38	38	36	36	37	37
Davie 9									6	7				
Duplin	16	18	15	15	15	13	13	14	13	16	17	15	15	15
Durham-Orange	285	300	313	314	325	344	355	360	378	478	400	395	397	420
Edgecombe-Nash	62	67	66	65	61	65	69	66	68	70	70	70	69	72
Forsyth	203	213	221	221	220	222	221	234	236	247	240	253	258	254
Franklin	10	10	10	12	10	10	13	11	12	10	11	12	11	11
Gaston	70	69	70	70	72	73	73	74	77	80	78	79	76	67
Gates	3	3	3	3	3	2	2	2	1	1	1	1	1	1
Graham										1	1			
Granville	19	21	25	26	27	29	28	25	28	29	32	28	23	24
Greene	3	3	3			2		2	2	2	2			
Guilford	215	214	214	220	221	232	240	242	253	258	263	267	270	267
Halifax	31	32	32	33	32	29	28	28	25	27	27	26	26	25
Harnett	19	19	19	19	21	22	23	24	25	23	23	20	19	19
Haywood	26	26	31	33	35	34	33	31	32	32	29	32	31	31
Henderson	32	34	34	36	34	34	31	32	32	31	30	33	32	35
Hertford	17	14	15	16	16	17	16	16	16	15	15	16	15	15
Hoke	12	14	12	12	12	13	14	13	14	13	12	13	13	14
Hyde						1		1	1	1	1			
Iredell-Alexander	47	48	48	47	47	47	52	47	49	56	55			
Iredell												51	51	53
Jackson 10								11	13	13	13	12	14	14
Jackson-Swain	15	16	16	15	16	15	12							
Johnston	39	36	35	36	32	30	32	33	31	35	34	32	32	32
Jones	1	2	1			1	1	2	2	2	2			
Lee	16	16	16	17	16	17	19	20	20	21	22	24	23	23
Lenoir	41	40	42	47	49	50	49	50	51	50	48			
Lenoir-Green-Jones												48	47	47
Lincoln	10	13	12	12	13	12	12	13	14	14	14	13	13	13
Macon-Clay	9	12	11	10	11	11	9	9	10	10	8	8	6	6

STATUS OF MEMBERSHIP BY COUNTIES—Continued

	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Madison	6	7	7	7	10	8	6	6	6	6	6	6	6	6
Martin 11														
Martin-Washington-Tyrrell	16	16	17	17	16	15		16	8	16	16			
McDowell	12	12	12	11	11	11	11	11	11	10	11	11	11	11
Mecklenburg	270	271	284	289	290	310	314	320	333	348	345	351	353	363
Mitchell 12														
Mitchell-Avery 13														
Mitchell-Watauga 14														
Mitchell-Yancey	9	9	9	10	13	11	12	10	11	11	11	11	12	12
Montgomery 15	10	11	8	7	7	8	8	7	7	7	7	7	7	7
Moore	34	32	31	32	32	31	32	37	35	36	37	39	40	39
Nash 16														
New Hanover	73	76	77	76	80	80	79	81	74	73	75	79	94	90
Northampton	3	4	4	4	4	3	3	3	3	4	4	5	5	5
Onslow	12	13	12	12	14	15	18	16	13	15	13	15	14	14
Orange 17														
Pamlico	5	4	4	4	4	3	3	1	2	1	1			
Pasquotank-Camden-Currituck-Dare	28	29	28	26	26	28	28	27	22	27	26	29	32	32
Pasquotank-Camden-Dare 8														
Pender									4	4	4			
Perquimans 18														
Person	10	10	10	10	11	12	12	11	11	11	10	10	10	10
Pitt	46	44	41	43	41	42	44	43	46	46	48	55	60	62
Polk	10	11	10	11	11	12	13	13	16	15	17	17	17	17
Randolph	28	28	26	28	27	28	31	29	31	31	31	31	30	31
Richmond	20	19	20	22	22	25	23	22	21	22	22	22	21	21
Robeson	45	43	46	49	48	49	47	50	50	50	50	48	48	47
Rockingham	36	37	34	35	39	40	39	40	39	38	38	39	41	41
Rowan-Davie	63	60	62	63	63	63	67	53	60	63	62	62	64	64
Rutherford	26	27	25	27	25	25	24	25	25	26	25	24	24	24
Sampson	20	19	19	17	17	17	19	19	19	19	18	18	18	18
Scotland	14	13	13	16	14	17	19	17	17	18	19	19	22	22
Stanly 15	29	29	27	27	28	27	27	25	27	25	21	25	26	26
Stanly-Montgomery														
Stokes								3	5	5	5			
Surry 19														
Surry-Yadkin	30	35	38	38	37	39	30	42	38	39	39	36	33	34
Swain 10							4	5	5	5	4	4	4	4
Transylvania	9	11	11	12	13	12	13	14	13	15	14	12	13	12
Tyrrell 20														
Union	16	17	16	15	15	16	19	19	19	17	19	19	19	18
Vance	17	16	14	16	15	15	15	17	15	15	14	14	13	13
Wake	155	156	158	159	165	172	182	188	189	192	200	209	216	227
Warren	9	8	8	7	8	8	7	6	6	4	5	5	4	4
Washington-Tyrrell 11														
Watauga	11	10	10	9	9	10	11	11	12	12	10	10	11	11
Watauga-Ashe 22														
Wayne	42	43	44	47	50	52	50	55	56	56	56	55	53	53
Wilkes 2								18	19	19	19	18	17	17
Wilkes-Alleghany	20	21	22	23	17	18	18							
Wilson	36	38	39	38	40	42	43	44	46	49	52	54	55	55
Yadkin 19														
Yancey														
Totals	2,896	3,058	3,127	3,171	3,211	3,247	3,322	3,351	3,429	3,515	3,566	3,597	3,633	3,674

(1) See Iredell-Alexander. (2) See Wilkes-Alleghany. (3) See Watauga-Ashe and Ashe-Watauga. (4) See Mitchell-Avery. (5) See Pasquotank-Camden-Dare and Pasquotank-Camden-Currituck-Dare. (6) See Alamance-Caswell. (7) See Macon-Clay. (8) See Pasquotank-Camden-Currituck-Dare. (9) See Rowan-Davie. (10) See Jackson-Swain. (11) See Martin-Washington-Tyrrell. (12) See Mitchell-Avery, Mitchell-Watauga, and Mitchell-Yancey. (13) See Avery and Mitchell. (14) See Mitchell. (15) See Stanly-Montgomery, Montgomery, and Stanly. (16) See Edgecombe-Nash. (17) See Durham-Orange. (18) See Chowan-Perquimans. (19) See Surry-Yadkin. (20) See Washington-Tyrrell and Martin-Washington-Tyrrell. (21) See Mitchell-Watauga, Watauga-Ashe, and Ashe-Watauga. (22) See Ashe-Watauga.











